D-35/350

SERVICE MANUAL

US Model
Canadian Model
D-35

AEP Model
UK Model
E Model
Australian Model
D-350

Discman

Model Name Using Similar Mechanism	New Mechanism
CD Mechanism Name	CDM-350

SPECIFICATIONS

System: Compact disc digital audio system

Laser diode properties:
Material: GaAlAs
Wavelength: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 μW
(This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.)

Error correction: Sony Super Strategy Cross Interleave Read Solomon Code D-A conversion 16-bit linear 8fs digital filter

Frequency response: 20 – 20,000 Hz ±1dB (measured by EIAJ CP-307)

Output (at 9 V input level)
Line output (stereo minijack)
Output level 0.6 V rms at 50 kilohms
Load impedance over 10 kilohms
Headphones (stereo minijack)
9 mW + 9mW at 16Ω

General

Power requirements: Supplied:
- DC IN 9 V jack accepts the Sony AC power adaptor.

Where purchased	Operating voltage
US, Canadian model	120 V AC, 60 Hz
UK, Australian model	240 V AC, 50 Hz
AEP model	220 V AC, 50 Hz
E model	110 – 240 V AC, 50/60 Hz

- Lithium battery (Sony CR 2016)

Optional:
- DC IN 9 V accepts the Sony CPM-200P/CPM-100P mount plate and CPM-200A/CPM-100A plate arm for use on 12 V car battery.
- DC 3 V two LR6 (size AA) alkaline batteries

Power consumption: 1.9 W DC

Dimensions: Approx. 127.5 × 25.2 × 137.4 mm (5 1/8 × 1 × 5 1/2 in.) (w/h/d) incl. projecting parts and controls

Weight: Approx. 390 g (13.8 oz.) net
Approx. 420 g (14.9 oz.) incl. batteries

Supplied accessories:
AC power adaptor (1)
Rechargeable battery (1)
Battery case (1)
Lithium battery (1)
Connecting cord (phono plug × 2 ↔ stereo miniplug) (1)
Stereo ear receiver with remote controller (1)
Carrying case (1)
Hand strap (1)

Design and specifications subject to change without notice.

CAUTION

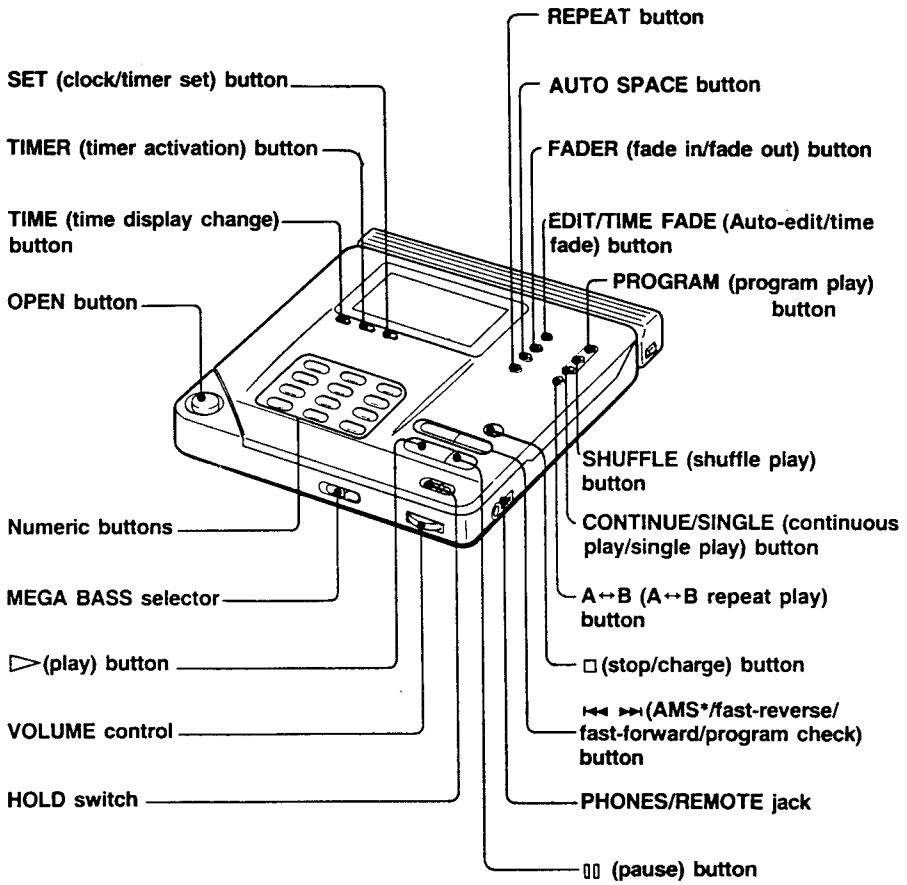
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

MICROFILM

COMPACT DISC COMPACT PLAYER

SONY®

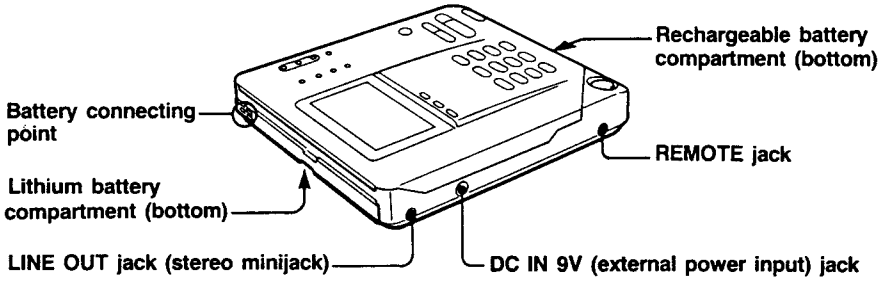
Location and Function of Controls



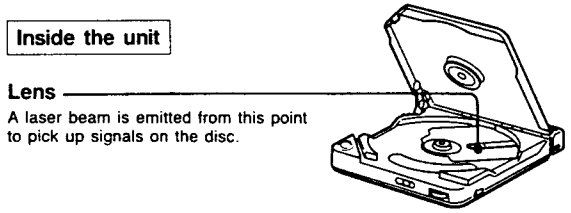
*AMS is the abbreviation of Automatic Music Sensor.

To avoid accidental operation

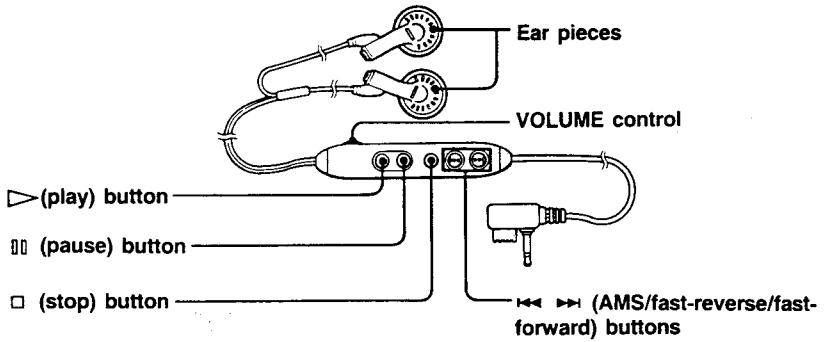
Slide the HOLD switch in the direction of the arrow. An orange indicator appears and the unit cannot be operated. In this case, however, you can operate the unit with the remote controller.


Rechargeable battery compartment (bottom)
Battery connecting point
REMOTE jack
Lithium battery compartment (bottom)
LINE OUT jack (stereo minijack)
DC IN 9V (external power input) jack

Inside the unit



Ear receiver with remote controller



Operating the remote controller

The buttons on the remote controller function in the same way as the corresponding buttons on the unit. You can operate the unit even if the HOLD switch on the unit is set in the direction of the arrow.

SECTION 2
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK

The laser diode in the opticaal pick-up block may suffer electrostatic breakdown because of the potential defference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is incloded in the repair parts.

Flexible Circuit Board Repairing

1. Keep the temperature of the soldering iron at 270 ° ± 10℃ during repairing.
2. Do not touch the soldering iron more than 4 seconds or 3 times on the same conductor of the circuit board.
3. Do not apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Before Replacing the Optical Block

Please be sure to check thoroughly the parameters as par the "Optical Block Checking Procedures" (Part No.: 9-960-027-11) issued separately before replacing the optical block.
Note and specifications required to check are given below.

- FOK output: IC501 ⑨ pin
- S curve P-to-P value: 2.5 Vp-p.
  When checking FOK and S curve P-to-P value, remove the lead wire to disc motor and unsolder and open IC801 ⑯ pin.
- RF signal P-to-P value: 0.9 – 1.1 Vp-p
- Traverse signal P-to-P value: 2 Vp-p
- The grating holder can not repair.
- Adjusted part for tracking gain adjustment: RV501

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe, from more than 30 cm away from the objective lens.

Laser Diode Check Procedure

The laser diode on this set will not emit unless the top panel is closed and S901 (push SW type) is turned on. The laser diode will always emit even if focus search is not performed in service mode.
The laser diode if checked using the current value which flows to the laser diode inside the optical pick-up.

Procedure 1 (service mode or normal operation)

1. Open upper panel.
2. S901 on as Fig. 1.
   (In service mode, this operation is not necessary.)
3. Observe the objective lens and confirm that the laser diode goes on about 2.5 seconds due to focus search. If it does not, APC circuit or the optical pick-up is defective.

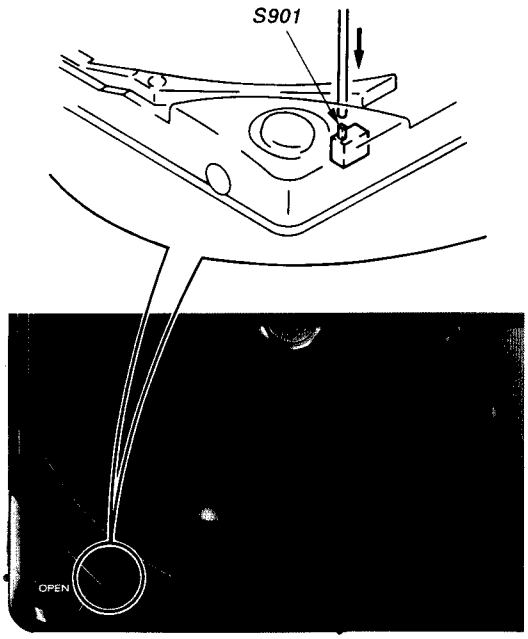
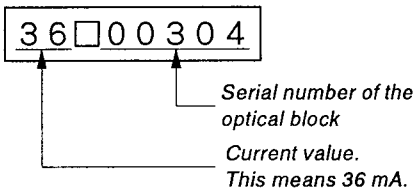


Fig. 1 Turning S901 Connection

Procedure 2 (service mode or normal operation)
Check by the curent with flows in the laser diode.

1. Close the top panel.
2. Remove the main board and read the current value on the label affixed to the optical pick-up.
   (Label on the flexible board of the optical pick-up)



The currrent value varies with the set.

3. Connect a VOM as shown in Fig. 2.
4. Press the ▷ key.
5. Calculate the current by the VOM reading.
   VOM reading (V) ÷ 10 = current (A)
   ex. VOM reading = 0.37 V
   0.37 ÷ 10 = 0.037 (A) = 37 (mA)
6. Confirm that the ammeter reading is within the range given below.
   value on label $^{+5}_{-11}$ mA (25 ℃)
   variation relative to temperature: 0.4 mA/℃
   (Current increases when temperature rises and decreases when it drops.)
   If the value is more than the range given, diode has deteriorated. If it is less, APC circuit or the optical pick-up is defective.

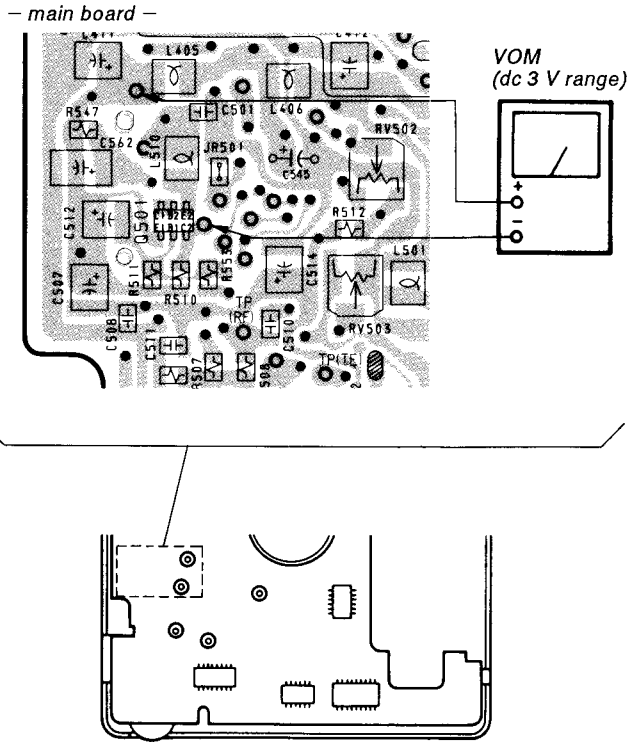
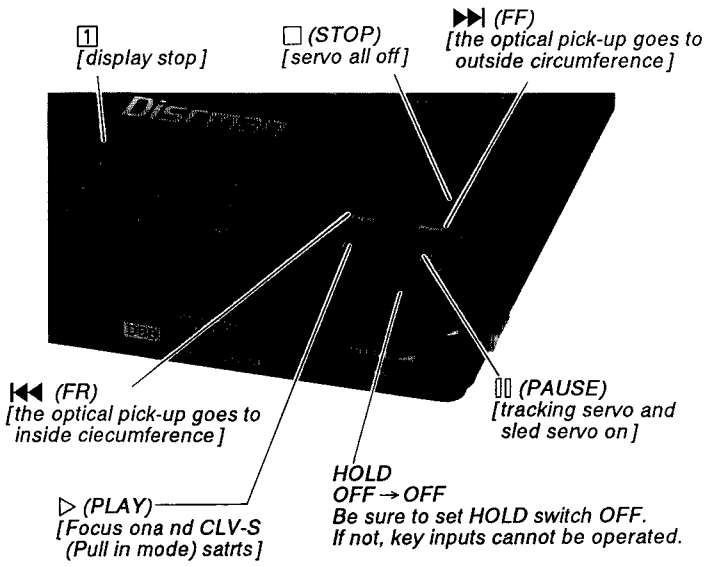


Fig. 2 VOM Connection

SERVICE MODE (service program)

This set has built-in service program in the microcomputer as usual sets.
The operation method of service program is explained below.

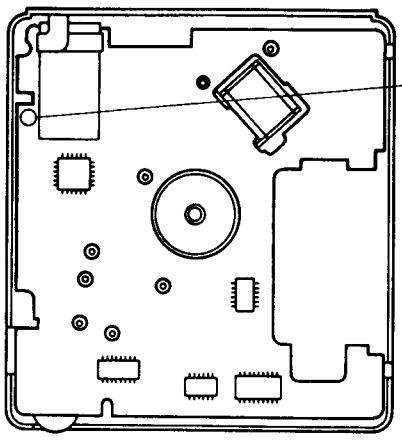


[ ]: Main operation in service mode for details, refer to step 2.

Fig. 3 Key Positions

Step 1 (Service Mode setting method)

1. Turn the HOLD switch OFF with the external power supply not plugged in (no power applied to set) and press the ▷ key.
2. Solder jumper TEST point.
   (IC801 pin ⑫ (TEST) pin is grounded.)
3. Plug in external power supply.
   This puts the set into service mode.

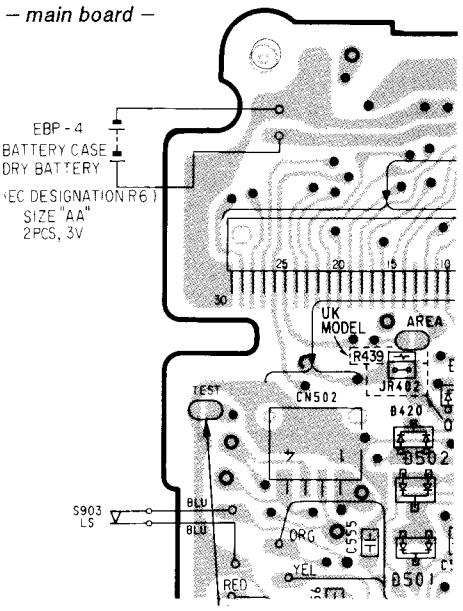


Step 2 (Service Mode operation)

1. When service mode is set, the display will change 6 times, and those 6 changes will be repeated over and over.
   With this the LCD display should be present in service mode. Even if LCD does not display, other operations will be performed.
2. When ▶▶| or |◀◀ key is pressed, the optical pick-up moves to the inside or outside circumference. Tracking servo and sled servo go off when this is done, so press ▯▯ to turn on the tracking servo if necessary.
3. When 1 is pressed, the display stops.
   When 1 released, the display continues to change. This allows check of each segment.
4. When ▷ key is pressed, CLV-S (pull-in mode) starts while performing focus search. When there is no disc installed, focus search is repeated several times while disc motor is rotating.
5. When ▯▯ is pressed, tracking servo, sled servo and CLV-A (servo during PLAY) go ON.
6. When 4 and 5 are performed, the disc begins to play. At this time, the top panel should be closed and S901 are to be ON. When S901 is OFF, muting is ON. So there is no sound.
7. All servo (focus, tracking, sled and spindle) go off when □ key is pressed. But disc motor continues rotating for a while by inartia.

Step 3 (Service Mode release)

1. First be sure to unplug the external power supply, then remove the TEST point solder jumper.
2. The set will now operated normally.



TEST terminal
Solder jumper for the service mode.
[After checking or adjusting in the service mode, be sure to remove this solder jumper.]

SECTION 3
ELECTRICAL ADJUSTMENTS

Notes on Adjustment

1. Perform adjustments except for RECHARGEABLE VOLTAGE ADJUSTMENT in service mode. Be sure to release aervice mode after completing adjustment.
   (Refer to "Service Mode (service program)" on page 5.)
2. Perform adjustments in the order given.
3. Use YEDS-18 disc (part No.: 3-702-101-01) unless otherwise indicated.
4. Power supply voltage: DC 9V
   HOLD switch: OFF
   VOLUME knob: Minimum
   MEGA BASS switch: NORM

PREPARATION

Put the set into service mode (see page 5) and perform the following checks. Repair if there are any abnormalities.

• Sled Motor Check

1. Press the OPEN button and open the top panel.
2. Press the ▶▶| , |◀◀ keys and make sure that the optical pick-up moves smoothly, without catching, from the inmost → outmost → inmost circumference.
   ▶▶| : The optical pick-up moves outward
   |◀◀ : The optical pick-up moves inward

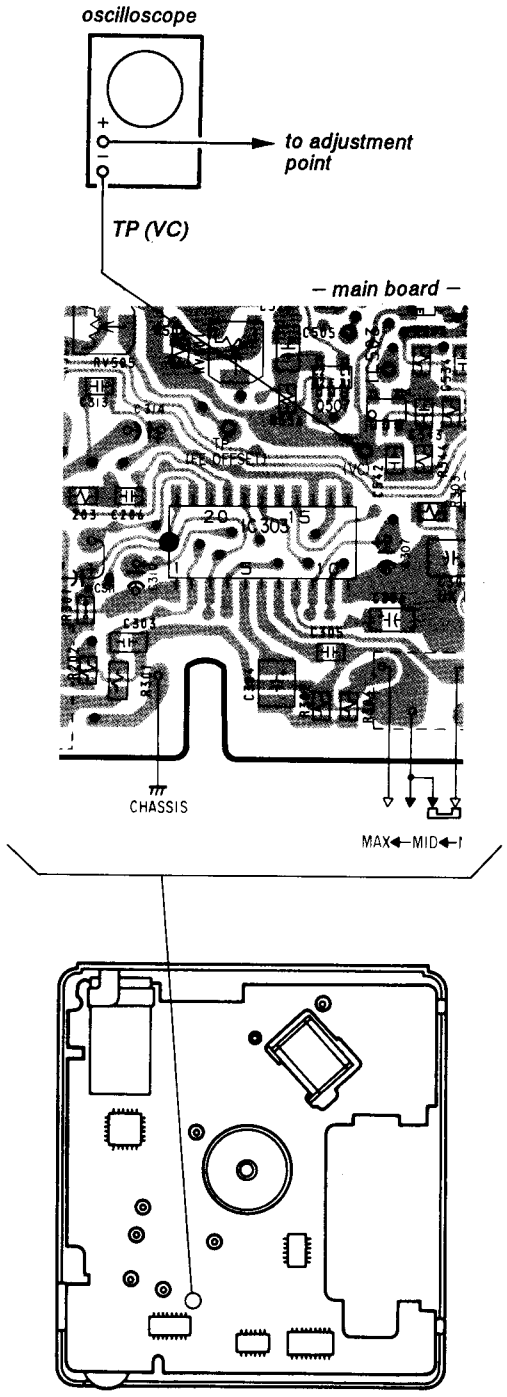
• Focus Search Check

1. Press the OPEN button and open the top panel.
2. Press the ▷ key. (Focus search is performed continuously.)
3. Observe the optical pick-up objective lens and check that it moves smoothly up and down with no catching or noises.
4. Press the □ key.
   Check that focus search operation stops. If it does not stop, press the □ key again longer than before.

VC (1/2 Vcc) Connecting Point

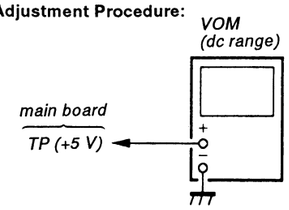
FOCUS BIAS ADJUSTMENT
TRACKING BALANCE ADJUSTMENT

When the adjustments above are performed, connect the ⊖ side of oscilloscope to the point below.



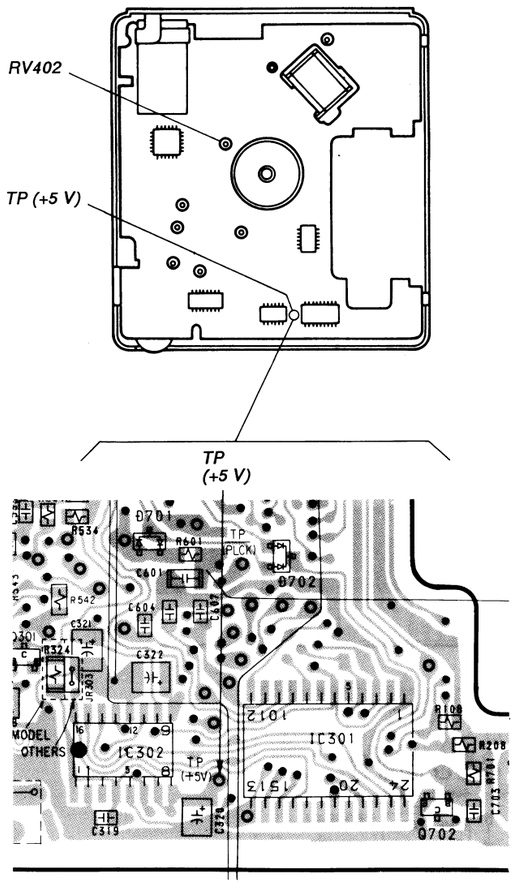
+5 V Adjustment

Adjustment Procedure:



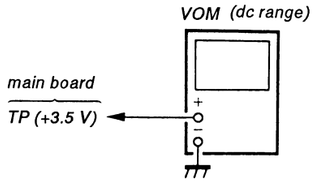
1. Put the set into service mode stop state (see page 5).
2. Connect the VOM to main board TP (+5 V).
3. Adjust RV402 for +5 ± 0.1V reading on the VOM.
4. After adjustment, release service mode (see page 5).

Adjustment Location: main board



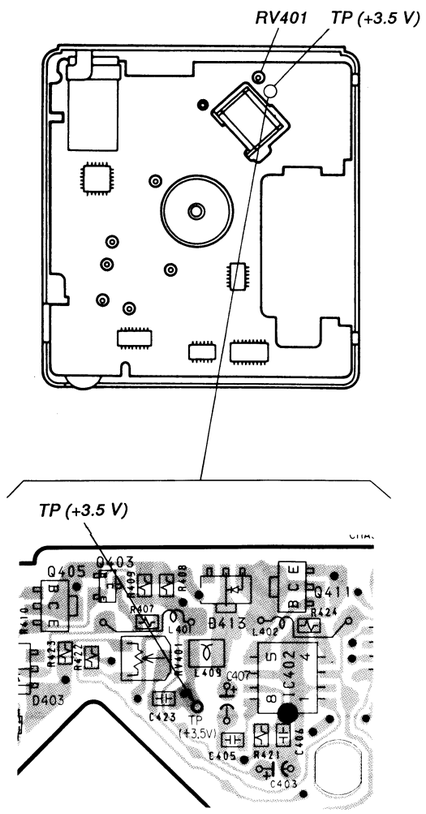
+3.5 V Adjustment

Adjustment Procedure:



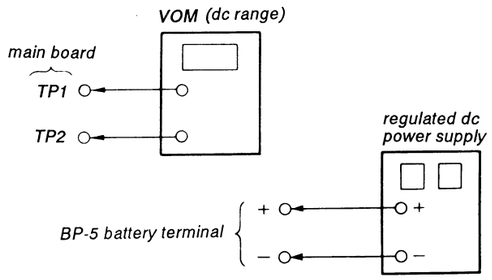
1. Put the set into service mode stop state (see page 5).
2. Connect the VOM to main board test point TP (+3.5 V).
3. Adjust RV401 for 3.5 ± 0.05 V reading on the VOM.
4. After adjsutment, release service mode (see page 5).

Adjustment Location: main board

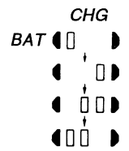


Charge Det Voltage Adjustment

Adjsutment Procedure:

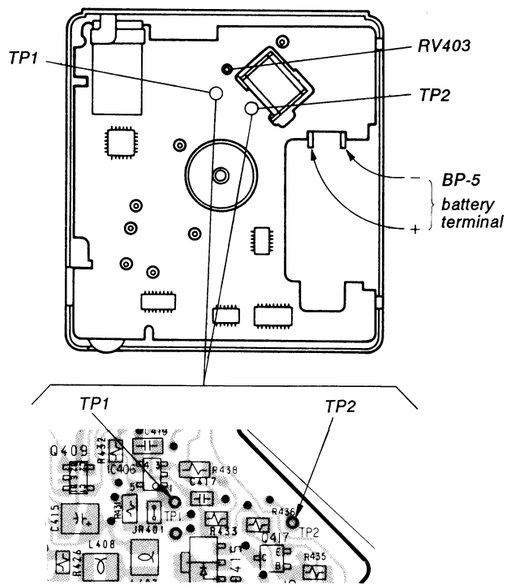


1. Connect VOM to TP1 and 2 on the main board and supply 3.92 Vdc to BP-5 battery terminal. (At this time, supply 9 Vdc to the external power supply jack (DC IN 9 V).)
2. Confirm the LCD module display becomes to the charge mode as following.



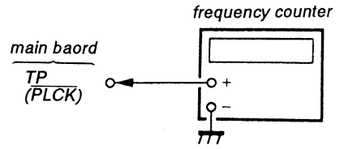
3. Adjust RV403 for 0 ± 10 mV reading on VOM.

Adjsutment Location: main board



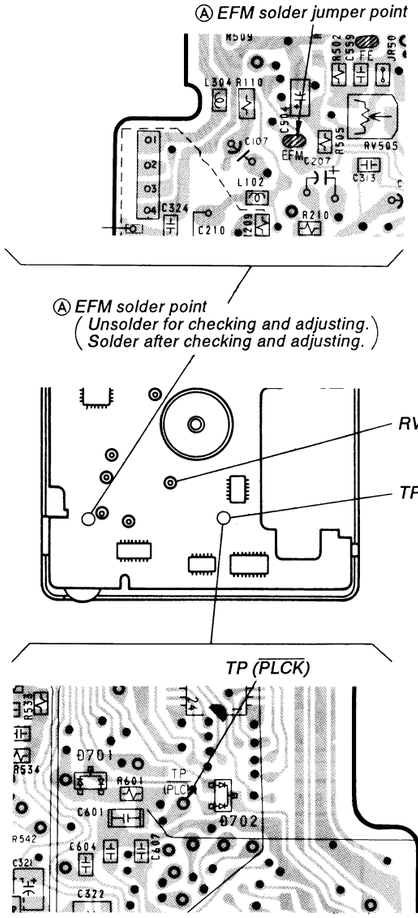
PLL Free Run Frequency Check and Adjustment

Check/Adjustment Procedure:



1. Disconnect the jumper point Ⓐ (EFM) in the diagram below.
2. Connect a frequency counter to servo board test point TP (PLCK).
3. Put the set into service mode stop state (see page 5).
4. Check that the frequency counter reading is 4.3218 ± 0.01 MHz. If not, adjust RV504 so that it is 4.3218 ± 0.01 MHz.
5. After adjustment, release service mode (see page 5).
6. Short the jumper point disconnected in step 1.

Check/Adjustment Location: main board



Tracking E

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8. After adj

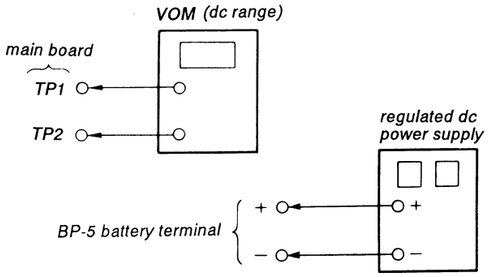
Adjustment

RV502

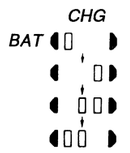
TP (TE)

Charge Det Voltage Adjustment

Adjsutment Procedure:

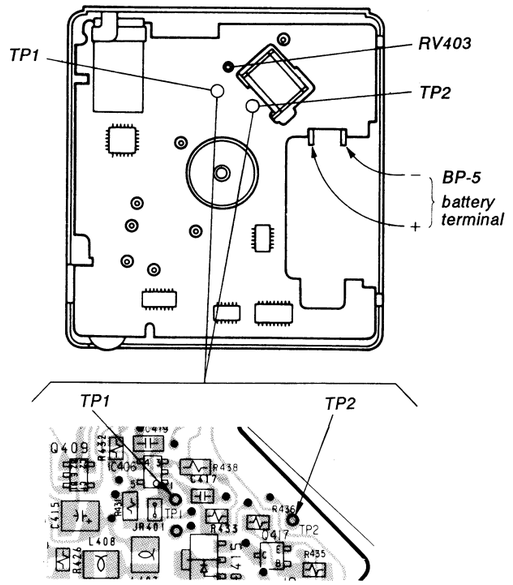


1. Connect VOM to TP1 and 2 on the main board and supply 3.92 Vdc to BP-5 battery terminal. (At this time, supply 9 Vdc to the external power supply jack (DC IN 9 V).)
2. Confirm the LCD module display becomes to the charge mode as following.



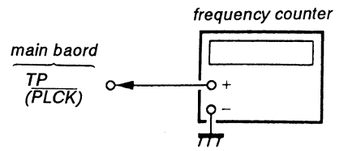
3. Adjust RV403 for 0 ± 10 mV reading on VOM.

Adjsutment Location: main board



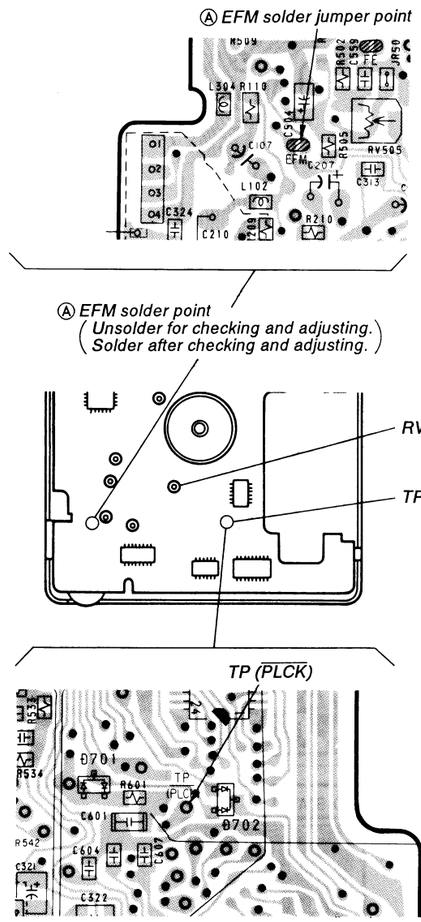
PLL Free Run Frequency Check and Adjustment

Check/Adjustment Procedure:



1. Disconnect the jumper point Ⓐ (EFM) in the diagram below.
2. Connect a frequency counter to servo board test point TP ($\overline{PLCK}$).
3. Put the set into service mode stop state (see page 5).
4. Check that the frequency counter reading is 4.3218 ± 0.01 MHz. If not, adjust RV504 so that it is 4.3218 ± 0.01 MHz.
5. After adjustment, release service mode (see page 5).
6. Short the jumper point disconnected in step 1.

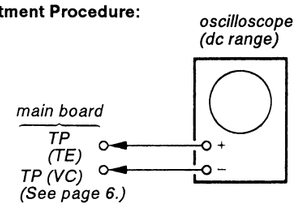
Check/Adjustment Location: main board



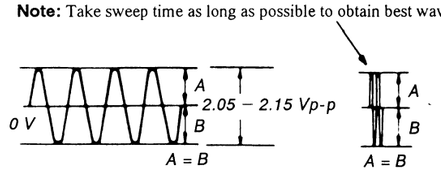
Tracking Balance Adjustment

Conditions:
The set should be placed either horizontally.

Adjustment Procedure:

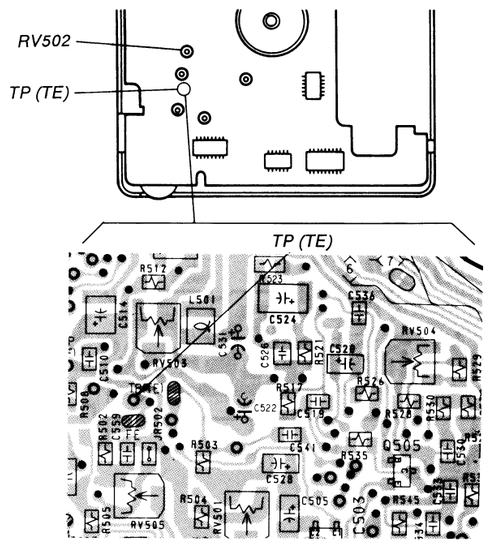


1. Connect the oscilloscope to servo board TP (TE).
2. Put the set into service mode stop state (see page 5).
3. Press the ▶▶| and |◀◀ keys to move the optical pick-up to the center.
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the ▷ key.
   (It will go form focus search to focus on, and CLV pull-in mode state. Tracking and sled are OFF.)
6. Adjsut RV502 so that the oscilloscope waveform is symmerical on the top and bottom in relation to 0 V.
   Note: Take sweep time as long as possible to obtain best waveform.



7. Press the □ key to stop spindle motor from rotating.
8. After adjustment, release service mode (see page 5).

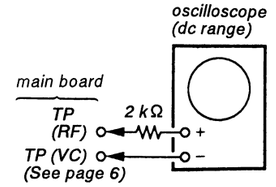
Adjustment Location: main board



Focus Bias Adjustment

Conditions:
The set should be placed either horizontally.

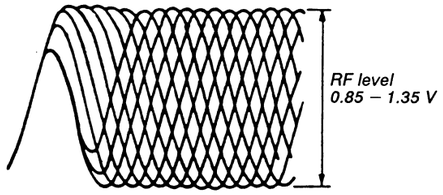
Adjustment Procedure:



1. Put the set into service mode stop state (see page 5).
2. Connect the oscilloscope to main board test point TP (RF).
3. Press the ▶▶| and |◀◀ keys to move the optical pick-up to the center. (Move the optical pick-up to the music area on the disc to enable easy visibility of the eye pattern).
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the key.
   (It will go form focus search to focus on, and CLV pull-in mode state. Tracking and sled are OFF.)
6. Press the ▯▯ button. (Tracking and sled go ON.)
7. Adjust RV503 so that the oscilloscope waveform eye pattern is good. A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

- **RF Signal Reference Waveform (eye pattern)**

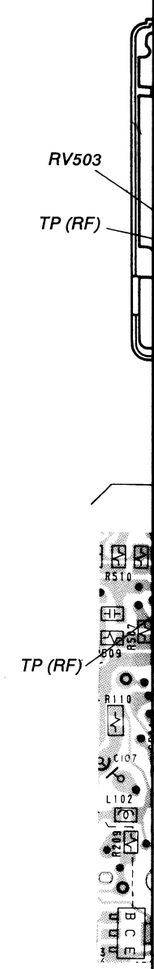
VOLT/DIV: 200 mV
TIME/DIV: 500 nS



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

8. Press the □ key to stop spindle motor from rotating.
9. After adjustment, release service mode (see page 5).

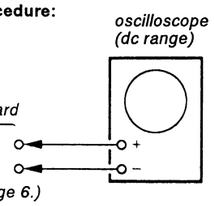
Adjsutment Lo



nce Adjustment

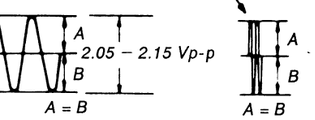
laced either horizontally.

cedure:



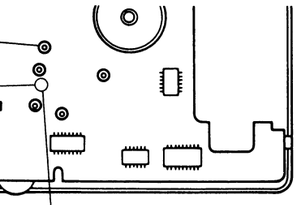
cilloscope to servo board TP (TE).
service mode stop state (see page 5).
H and ⏮ keys to move the optical pick-up to the

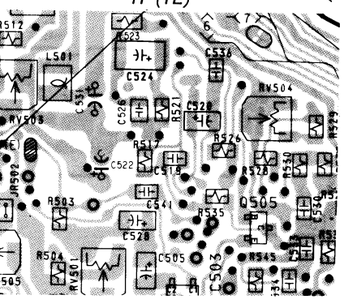
(YEDS-18) and close the top panel.
ey.
form focus search to focus on, and CLV pull-in
e. Tracking and sled are OFF.
so that the oscilloscope waveform is symmerical on
tom in relation to 0 V.
veep time as long as possible to obtain best waveform.



y to stop spindle motor from rotating.
nt, release service mode (see page 5).

tion: main board

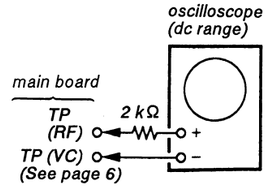




Focus Bias Adjustment

Conditions:
The set should be placed either horizontally.

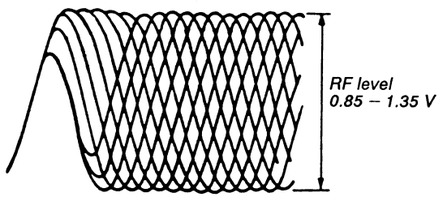
Adjustment Procedure:



1. Put the set into service mode stop state (see page 5).
2. Connect the oscilloscope to main board test point TP (RF).
3. Press the ⏭ and ⏮ keys to move the optical pick-up to the center. (Move the optical pick-up to the music area on the disc to enable easy visibility of the eye pattern).
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the key.
   (It will go form focus search to focus on, and CLV pull-in mode state. Tracking and sled are OFF.)
6. Press the ▯▯ button. (Tracking and sled go ON.)
7. Adjust RV503 so that the oscilloscope waveform eye pattern is good. A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

- **RF Signal Reference Waveform (eye pattern)**

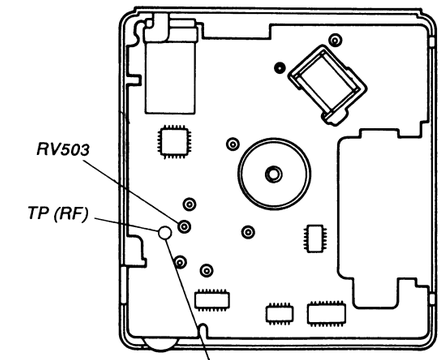
VOLT/DIV: 200 mV
TIME/DIV: 500 nS

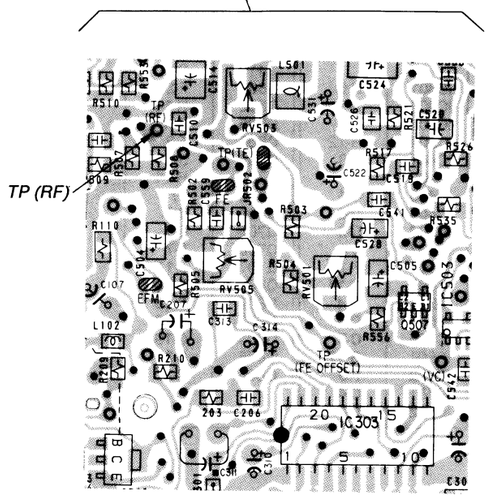


When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

8. Press the □ key to stop spindle motor from rotating.
9. After adjustment, release service mode (see page 5).

Adjsutment Locaton: main board





Reference

Focus/Tracking Gain Adjustment

A frequency responce analyzer or CD jig is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up followup (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate. However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is high, the noise when the 2-axis device operates increases.
- When gain is low, it is more susceptible to mechanical shock and skipping occurs more easily.

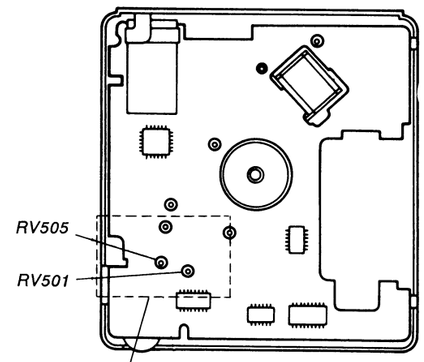
This adjustment is to be performed when replacing the following parts:
- optical pick-up block
- RV505 (focus gain VR)
- RV501 (tracking gain VR)

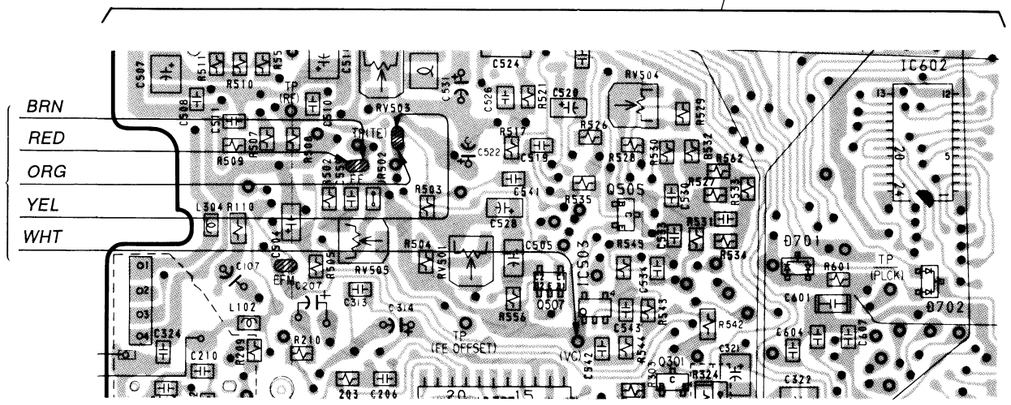
Be careful not to move RV505 (focus gain volume) and RV501 (tracking gain volume) ordinarily.

On this set, it is very difficult to simplify this adjustment. For those sets on which symptoms such as "occasional skipping" are hard to discover, or it is hard to tell if the set has been repaired, use the CD jig and perform this adjustment. Refer to the diagram below for connection of the CD jig. The adjustment procedure is described in the separate CD Jig Instruction Manual.

CD Jig Connecting Procedure:
Remove the solder jumpers at the TE and FE locations and connect the CD jig.
(Connect the points on both TE and FE located on the side of IC501 to the output to the CD jig, and points located on the side of volumes to the input from the CD jig.)

– main board –





SECTION 4
DIAGRAMS

• Waveforms

❶ PLAY: — 1.6V — APPROX. 100mVp-p

❷ PLAY: — 1.6V — APPROX. 500mVp-p

❸ PLAY: 2.4V / 1Vp-p / 0V

❹ 0.15μSEC — 2.8Vp-p

❺ 23μSEC — 3.4Vp-p

❻ 5.7μSEC

❼ 0.48μSEC — 3.5Vp-p

❽ 0.25μSEC — 3.9Vp-p

❾ 140μSEC — 3.4Vp-p

❿ 140μSEC — 3.4Vp-p

⓫ 140μSEC — 3.4Vp-p

⓬ 59nSEC — 1.9Vp-p

⓭ 2.9μSEC — 3.5Vp-p

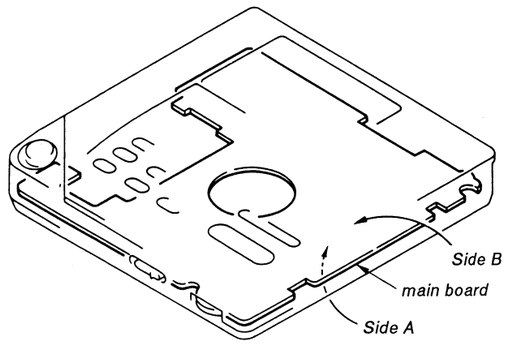
⓮ 3.8μSEC — 3.5Vp-p

⓯ 279nSEC — 3.4Vp-p

⓰ 31nSEC — 2Vp-p

⓱ 2.5SEC — 1.1Vp-p — DURING FOCUS SEARCH

3.2V / 0.4V — 4.1mSEC



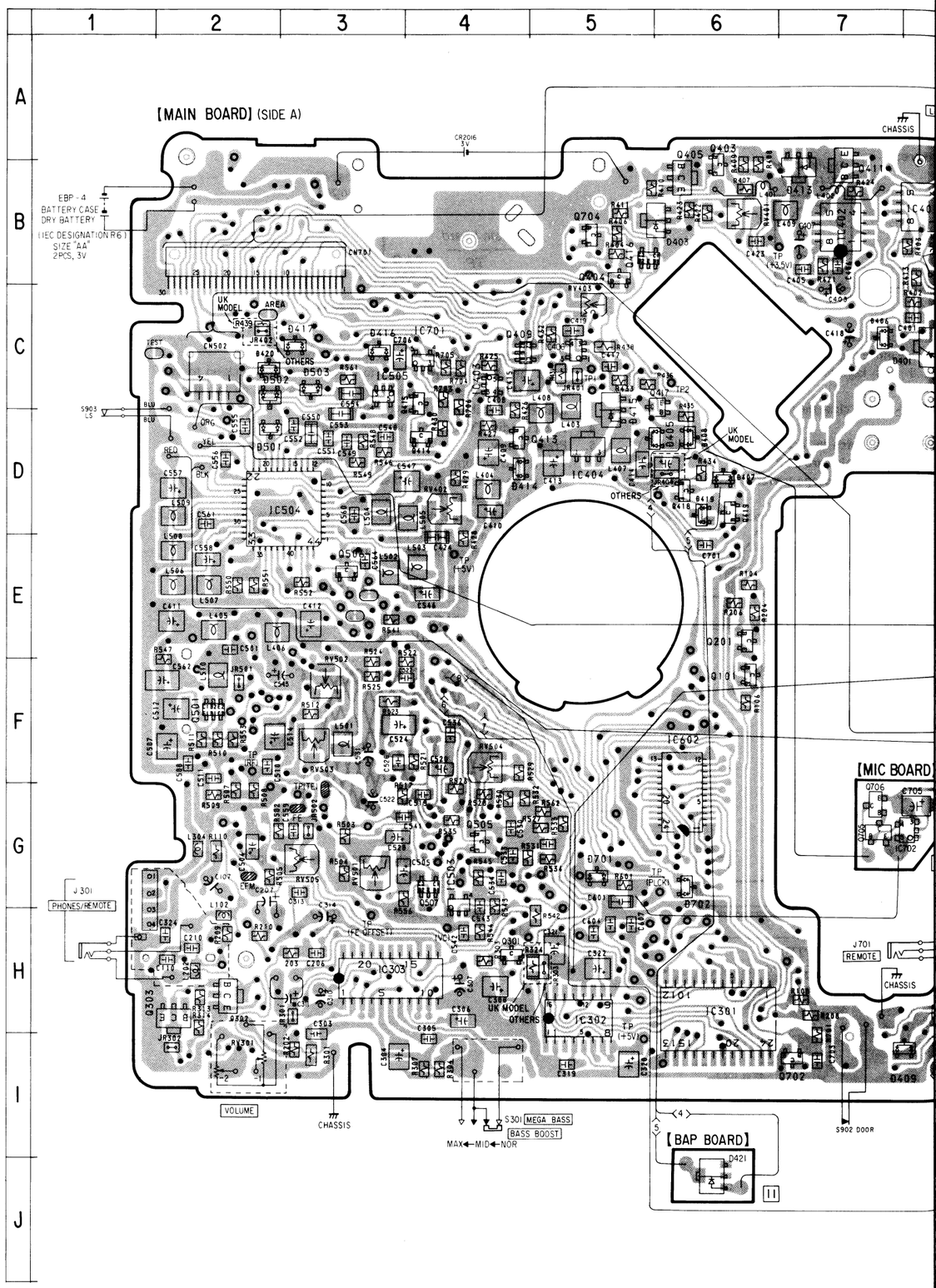
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D401	C-8	IC703	J-11
D402	B-10	IC801	D-23
D403	B-5	IC802	A-23
D405	D-6	IC803	C-18
D406	C-7		
D407	D-6	Q101	F-6
D408	D-6	Q201	E-6
D409	H-8	Q301	H-5
D410	H-8	Q302	I-2
D413	A-7	Q303	H-2
D414	D-4	Q304	H-16
D415	C-5	Q305	H-16
D416	C-3	Q306	
D417	C-3	Q401	C-8
D419	D-6	Q402	B-10
D420	D-5	Q403	A-6
D421	J-6	Q404	B-5
D501	D-2	Q405	A-6
D502	D-2	Q407	B-10
D503	C-3	Q408	B-8
D701	G-5	Q409	C-4
D702	G-6	Q411	A-7
D705	G-8	Q413	D-4
D801	E-20	Q414	D-4
D802	B-23	Q415	C-4
D805	C-20	Q416	B-5
D806	C-19	Q417	C-6
D807	C-18	Q418	D-6
		Q419	D-6
IC301	H-6	Q501	F-2
IC302	H-5	Q502	H-14
IC303	H-3	Q505	G-4
IC304	H-12	Q506	E-3
IC401	B-8	Q507	J-14
IC402	B-7	Q701	H-11
IC403	C-4	Q702	I-7
IC404	D-5	Q704	B-5
IC406	C-5	Q705	G-7
IC407	B-8	Q706	F-7
IC501	F-15	Q707	J-11
IC502	G-14	Q801	B-20
IC503	G-4	Q802	B-20
IC504	D-3	Q803	B-20
IC505	C-3	Q804	C-19
IC601	G-12	Q805	C-20
IC602	F-6	Q806	C-20
IC701	C-4		
IC702	G-8		

Note:

- ○——: parts extracted from the component side.
- ——: parts extracted from the conductor side.
- ■: parts mounted on the conductor side.
- ●: Through hole.
- ▒: Pattern on the side which is seen.
- ▒: Pattern of the rear side.

4-1. PRINTED WIRING BOARD



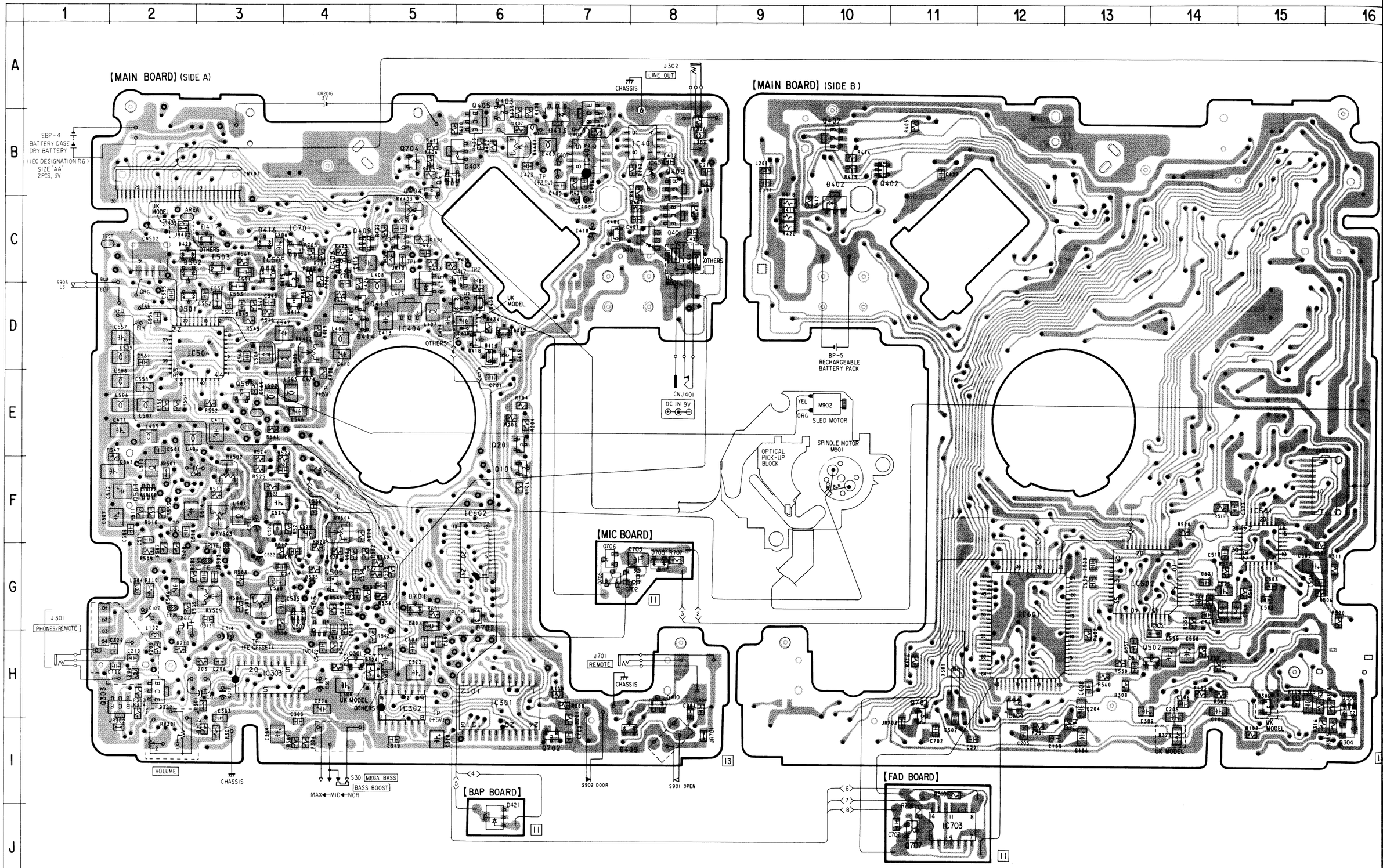
4-1. PRINTED WIRING BOARD

cation

ef. No.	Location
C703	J-11
C801	D-23
C802	A-23
C803	C-18
Q101	F-6
Q201	E-6
Q301	H-5
Q302	I-2
Q303	H-2
Q304	H-16
Q305	H-16
Q306	
Q401	C-8
Q402	B-10
Q403	A-6
Q404	B-5
Q405	A-6
Q407	B-10
Q408	B-8
Q409	C-4
Q411	A-7
Q413	D-4
Q414	D-4
Q415	C-4
Q416	B-5
Q417	C-6
Q418	D-6
Q419	D-6
Q501	F-2
Q502	H-14
Q505	G-4
Q506	E-3
Q507	J-14
Q701	H-11
Q702	I-7
Q704	B-5
Q705	G-7
Q706	F-7
Q707	J-11
Q801	B-20
Q802	B-20
Q803	B-20
Q804	C-19
Q805	C-20
Q806	C-20

from the component side.
from the conductor side.
on the conductor side.

side which is seen.
ear side.



【MAIN BOARD】(SIDE B)

BP-5
RECHARGEABLE
BATTERY PACK

M902
SLED MOTOR

SPINDLE MOTOR
M901

OPTICAL
PICK-UP
BLOCK

OTHERS

CNJ401
IN 9V

JR701 OPEN

【FAD BOARD】

IC703

UK MODEL

【SW BOARD】

S831
HOLD
ON OFF

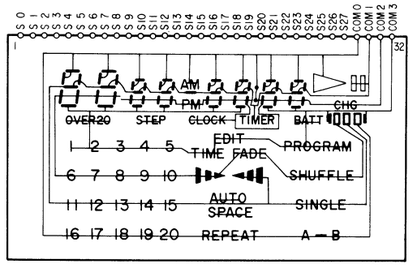
【UPPER LID PANEL MODULE】

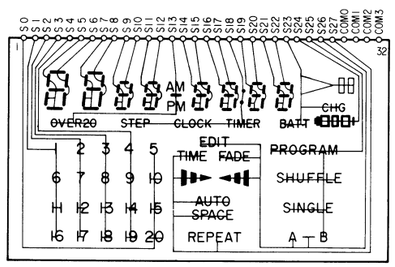
8 TIMES OVERSAMPLING DIGITAL FILTER

IC801

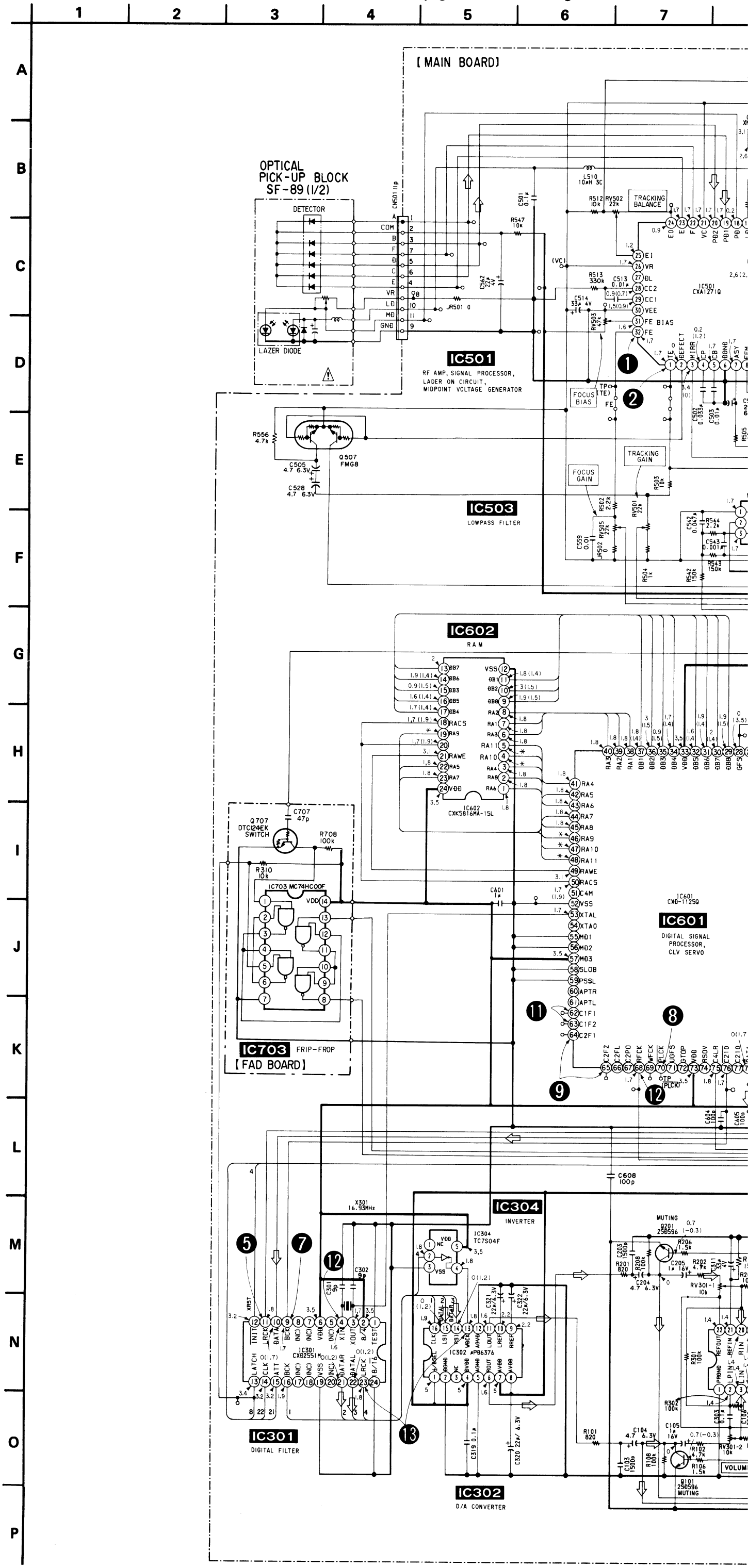
A⇔B
CONTINUE SINGLE
SHUFFLE
PROGRAM
PLAY MODE
REPEAT
AUTO SPACE
FADER
EDIT TIME FADE
SET
TIMER
TIME

LCD MODULE





4-2. SCHEMATIC DIAGRAM • See page 12 for waveforms and page 21 for IC block diagrams.

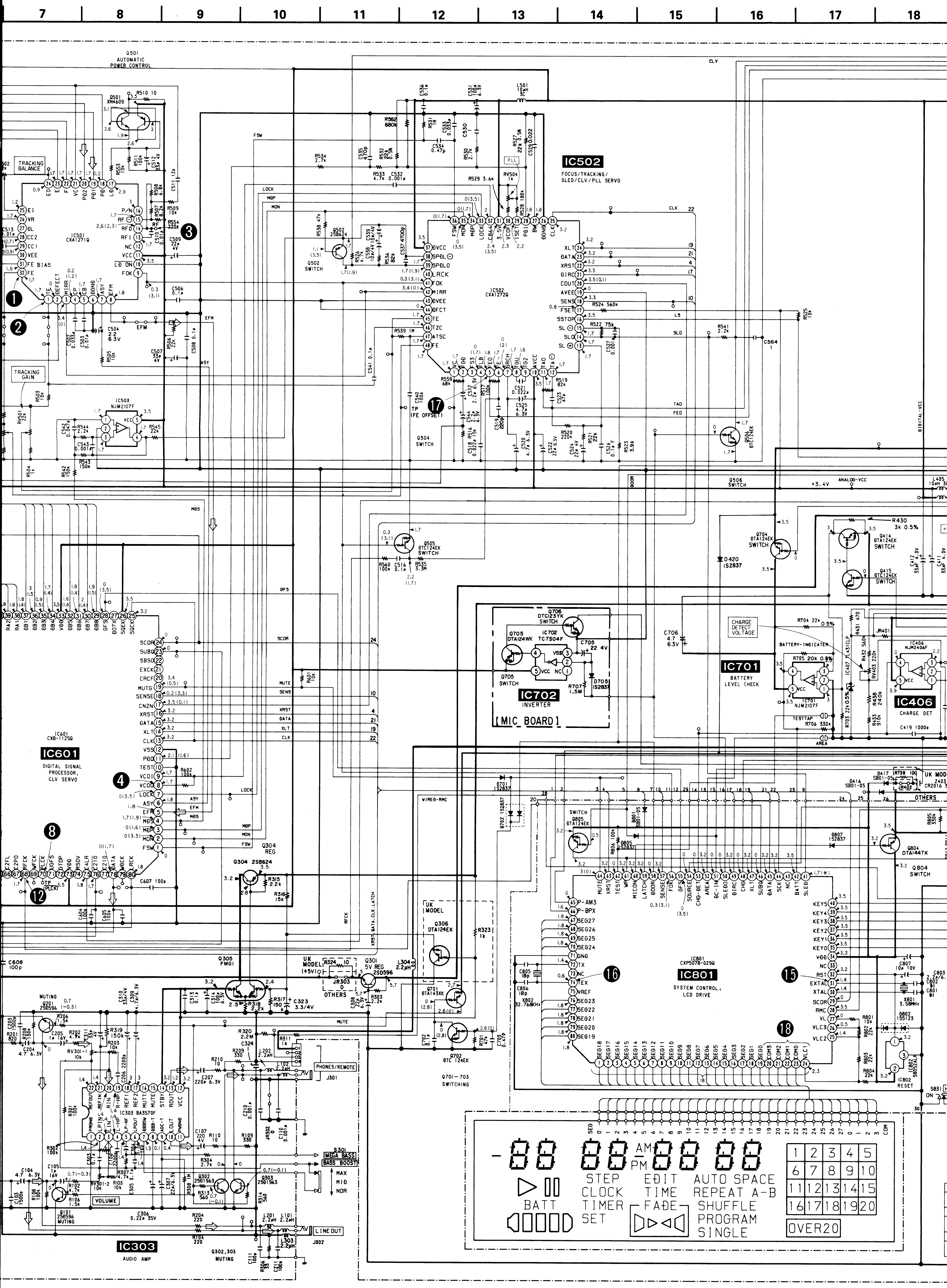


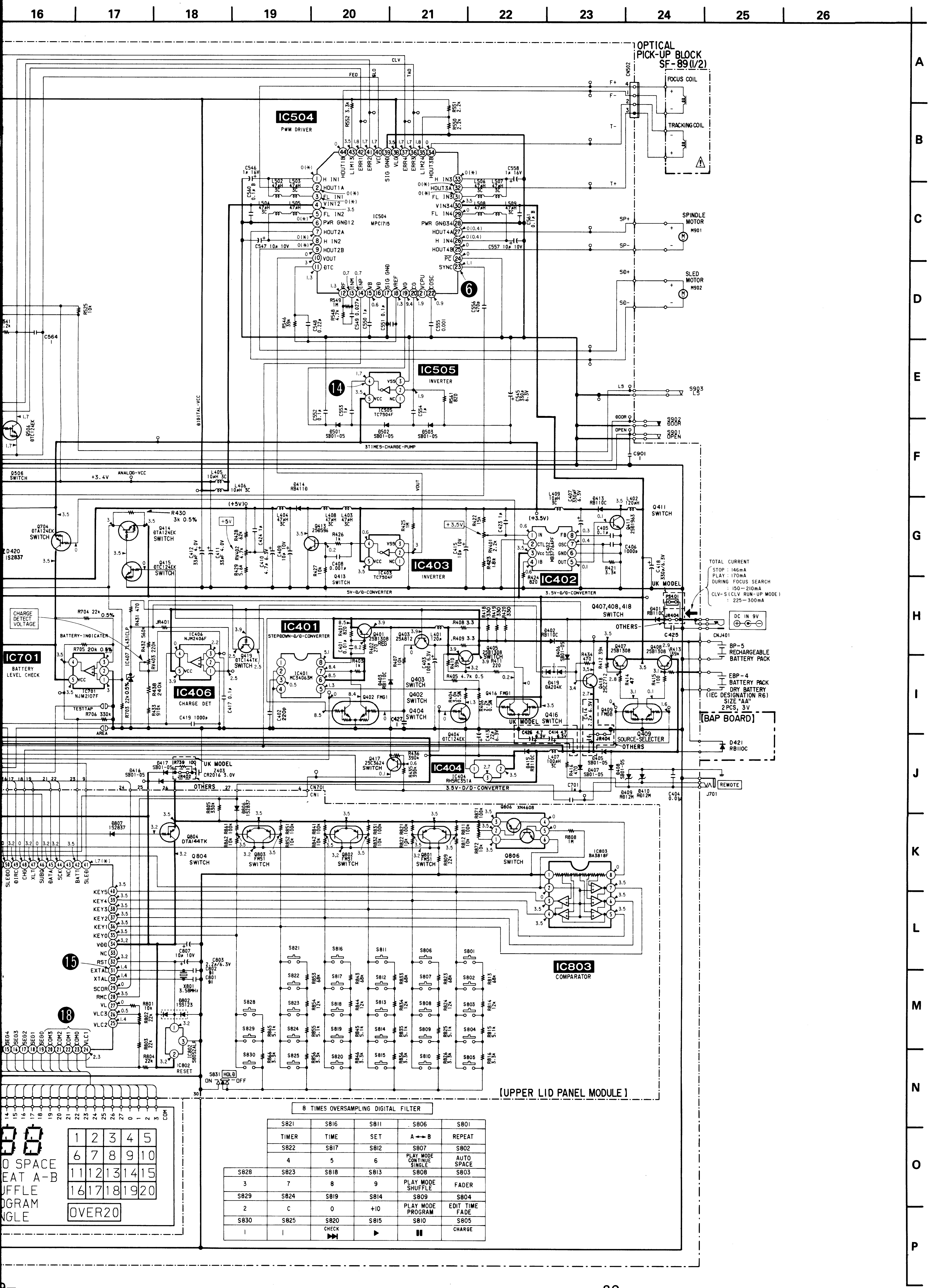
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- % : indicates tolerance.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B + Line.
- ▭ : adjustment for repair.
- Power voltage is dc 9 V and fed with regurated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under the service mode.
  no mark : STOP
  ( ) : PLAY
  * : Impossible to measure the voltage at the marked points.
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Wavefroms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to wavefroms.
- Signal path.
  ⇨ : CD
- Voltage, waveforms, and total current is measured under the upper panel is closed.
  See page 5 for the service mode setting.

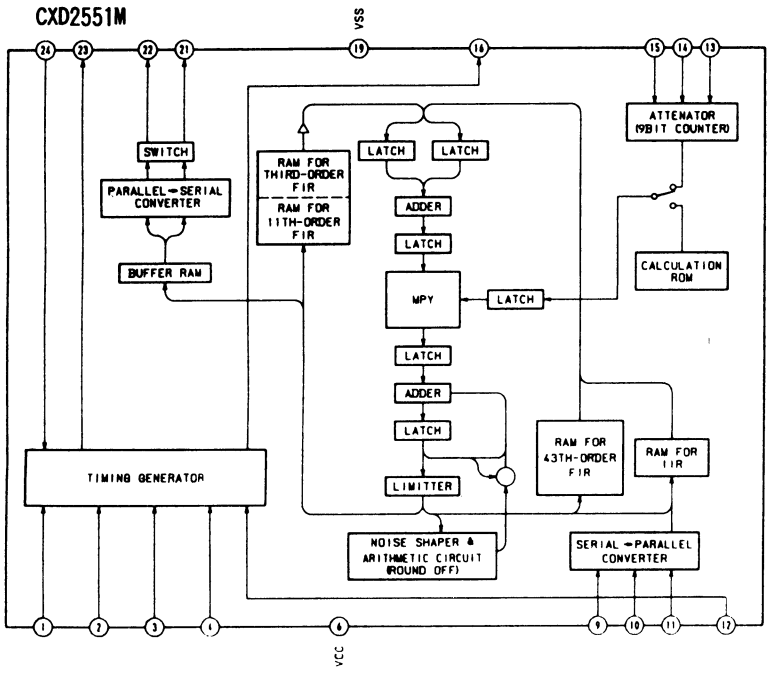

7
8
9
10
11
12
13
14
15
16
17
18
Q501
AUTOMATIC
POWER CONTROL
Q501 XN4609
TRACKING BALANCE
TRACKING GAIN
IC501 CXA1271Q
IC503 NJM2107F
IC502
FOCUS/TRACKING/
SLED/CLV/PLL SERVO
IC502 CXA1272Q
PLL
RV504 1k
Q502 2SB624
Q502 SWITCH
Q504 SWITCH
TP (FE OFFSET)
Q505 DTC124EK SWITCH
Q506 DTC124EK
Q506 SWITCH
CLV
CLK
LOCK
MDP
MON
FSW
EFM
ASY
MDS
GFS
SCOR
MUTE
SENS
XRST
DATA
XLT
TAO
FEO
DOOR
+3.4V
ANALOG-VCC
DIGITAL-VCC
IC601 CXD-1125Q
IC601
DIGITAL SIGNAL
PROCESSOR,
CLV SERVO
TP (PLCK)
Q304 2SB624
Q304 REG
Q305 FMG1
UK MODEL (+5V)
JR303 0 OTHERS
Q301 5V REG 2SD596
UK MODEL
Q306 DTA124EK
Q701 DTA143XK
Q702 DTC124EK
Q701-703 SWITCHING
WIRED-RMC
XRST, DATA, CLK, LATCH
RFCK
MUTING
Q201 2SD596
Q101 2SD596 MUTING
VOLUME
IC303 BA3570F
IC303
AUDIO AMP
Q302 2SD1963
Q303 2SD1963
Q302,303 MUTING
PHONES/REMOTE
J301
S301
MEGA BASS
BASS BOOST
MAX
MID
NOR
LINE OUT
J302
Q706 DTC123YK SWITCH
Q705 DTA124WK
IC702 TC7S04F
Q705 SWITCH
IC702
INVERTER
[MIC BOARD]
D420 1S2837
IC701
BATTERY
LEVEL CHECK
CHARGE DETECT VOLTAGE
BATTERY-INDICATER
IC701 NJM2107F
TESTTAP
AREA
Q704 DTA124EK SWITCH
Q414 DTA124EK SWITCH
Q415 DTC124EK SWITCH
IC407 TL431CLP
IC406 NJM2406F
IC406
CHARGE DET
D701 1S2837
D702 1S2837
D416 SB01-05
D417 SB01-05
UK MODEL
CR2016
OTHERS
SWITCH
Q805 DTA124EK
D801 SB01-05
D805 1S2837
D807 1S2837
Q804 DTA144TK
Q804 SWITCH
IC801 CXP5078-029Q
IC801
SYSTEM CONTROL,
LCD DRIVE
X802 32.768KHz
X801 3.58MHz
D802 1SS123
IC802 S8052ALR
IC802 RESET
S831
ON
STEP
CLOCK
TIMER
SET
BATT
EDIT
TIME
FADE
AUTO SPACE
REPEAT A-B
SHUFFLE
PROGRAM
SINGLE
AM
PM
OVER20


16 17 18 19 20 21 22 23 24 25 26
A B C D E F G H I J K L M N O P
OPTICAL PICK-UP BLOCK SF-89 (1/2)
FOCUS COIL
TRACKING COIL
SPINDLE MOTOR M901
SLED MOTOR M902
IC504 PWM DRIVER
IC504 MPC1715
IC505 INVERTER
3TIMES-CHARGE-PUMP
IC403 INVERTER
5V-D/D-CONVERTER
IC402
3.5V-D/D-CONVERTER
IC401 STEPDOWN-D/D-CONVERTER
IC406 CHARGE DET
IC701 BATTERY LEVEL CHECK
CHARGE DETECT VOLTAGE
BATTERY-INDICATER
IC404
3.5V-D/D-CONVERTER
TOTAL CURRENT
STOP : 146mA
PLAY : 170mA
DURING FOCUS SEARCH : 150－210mA
CLV-S (CLV RUN-UP MODE) : 225－300mA
DC IN 9V
BP-5 RECHARGEABLE BATTERY PACK
EBP-4 BATTERY PACK DRY BATTERY (IEC DESIGNATION R6) SIZE "AA" 2PCS, 3V
[BAP BOARD]
Q409 SOURCE-SELECTER
UK MODEL
OTHERS
REMOTE
IC803 COMPARATOR
[UPPER LID PANEL MODULE]
IC802 RESET
S831 HOLD ON OFF
8 TIMES OVERSAMPLING DIGITAL FILTER
O SPACE
EAT A-B
UFFLE
OGRAM
NGLE
OVER20

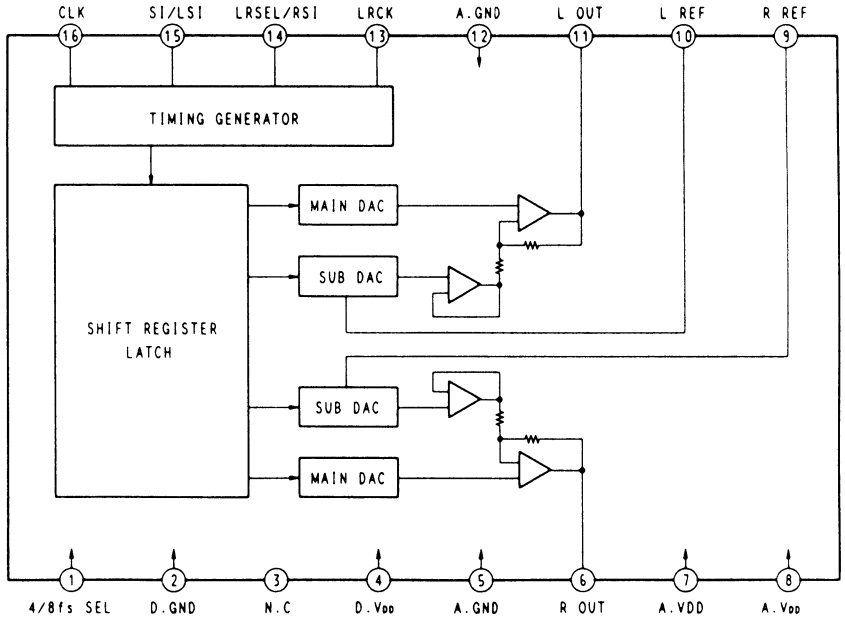
	S821	S816	S811	S806	S801
	TIMER	TIME	SET	A ↔ B	REPEAT
	S822	S817	S812	S807	S802
	4	5	6	PLAY MODE CONTINUE SINGLE	AUTO SPACE
S828	S823	S818	S813	S808	S803
3	7	8	9	PLAY MODE SHUFFLE	FADER
S829	S824	S819	S814	S809	S804
2	C	0	+10	PLAY MODE PROGRAM	EDIT TIME FADE
S830	S825	S820	S815	S810	S805
I	I	CHECK ▶▶I	▶	❚❚	CHARGE

• IC Block Diagrams

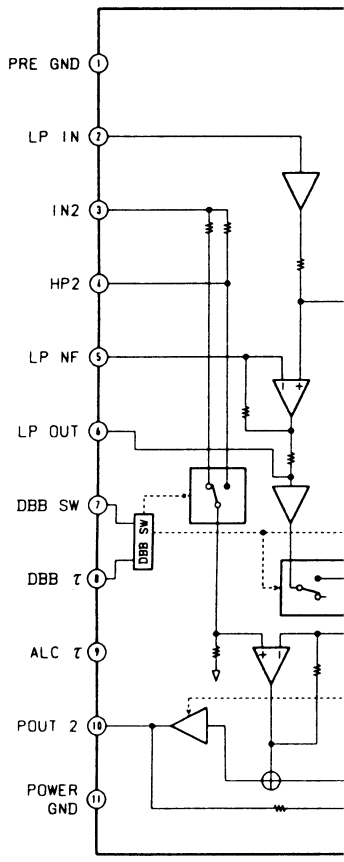
IC301
CXD2551M



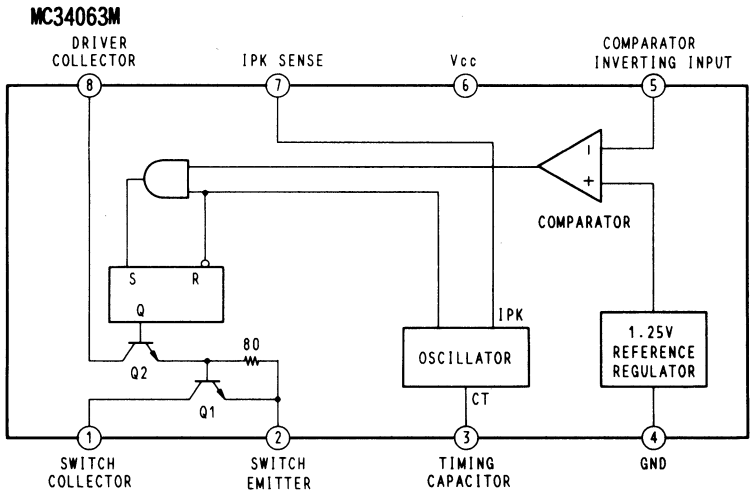
IC302
μPD6376



IC303
BA3570F



IC401
MC34063M



IC402
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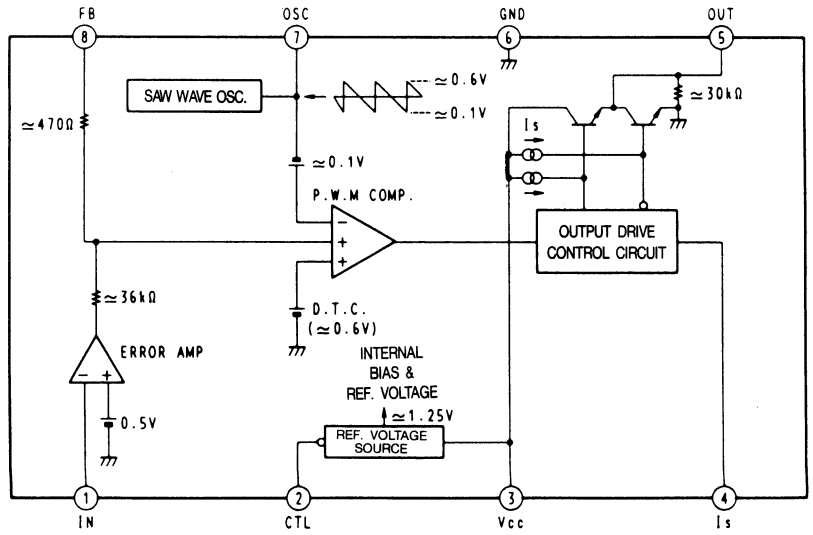
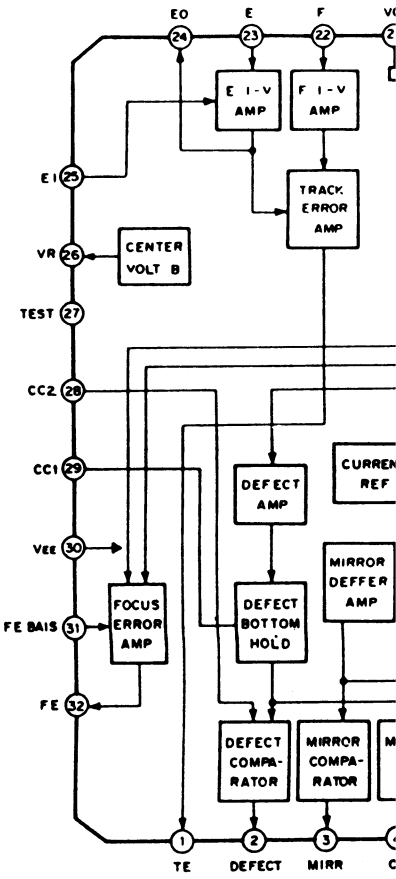
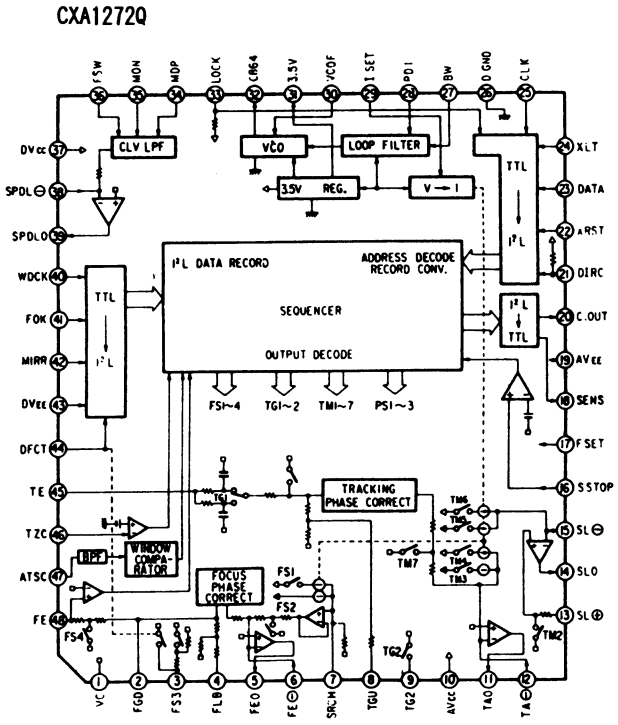


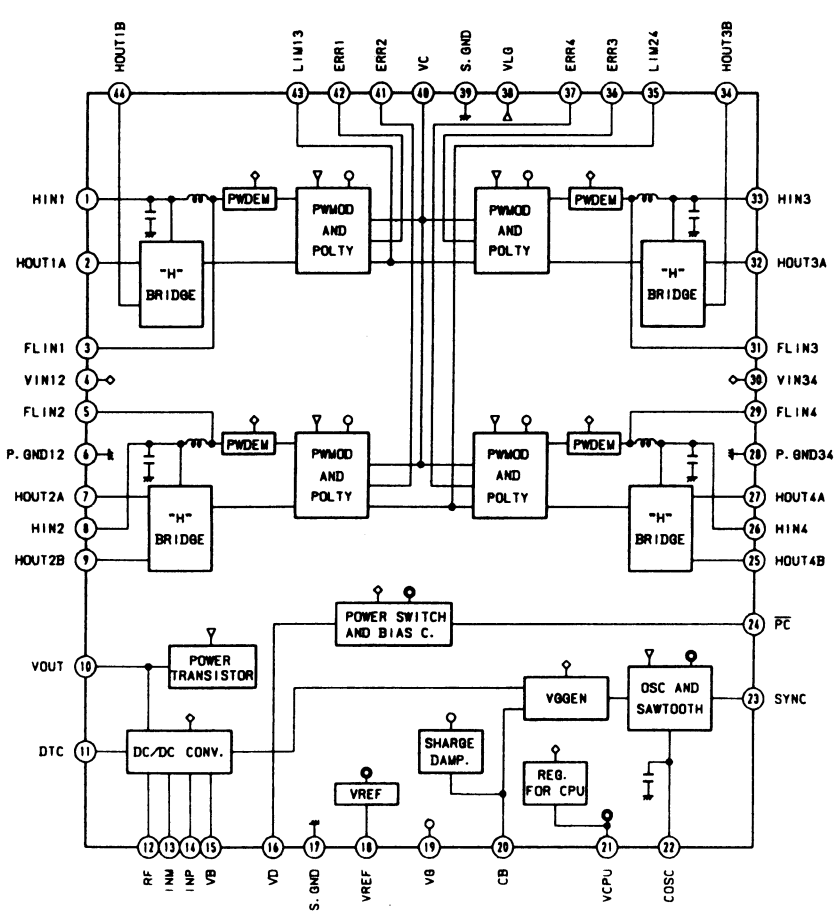
IC501
CXA1271Q



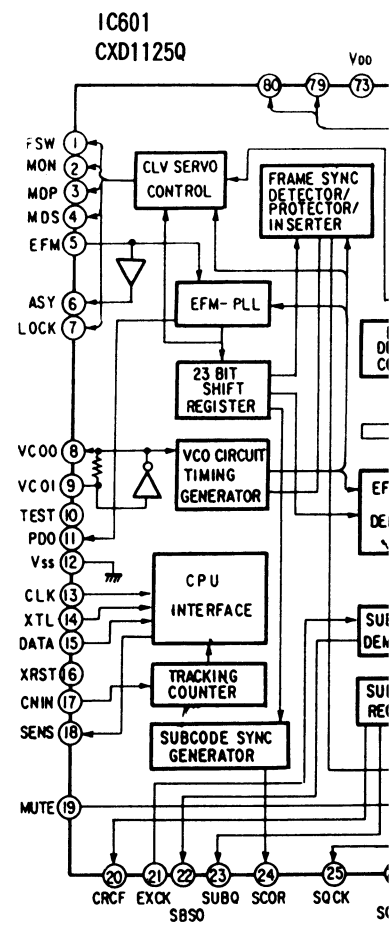
IC502
CXA1272Q



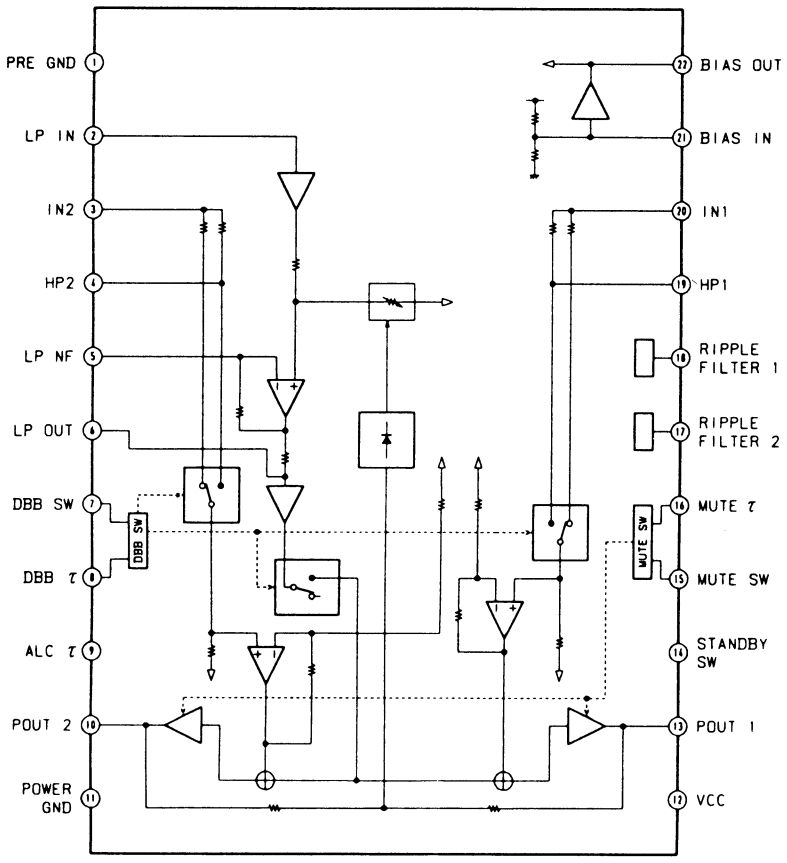
IC504
MPC1715



IC601
CXD1125Q



IC303
BA3570F



IC501
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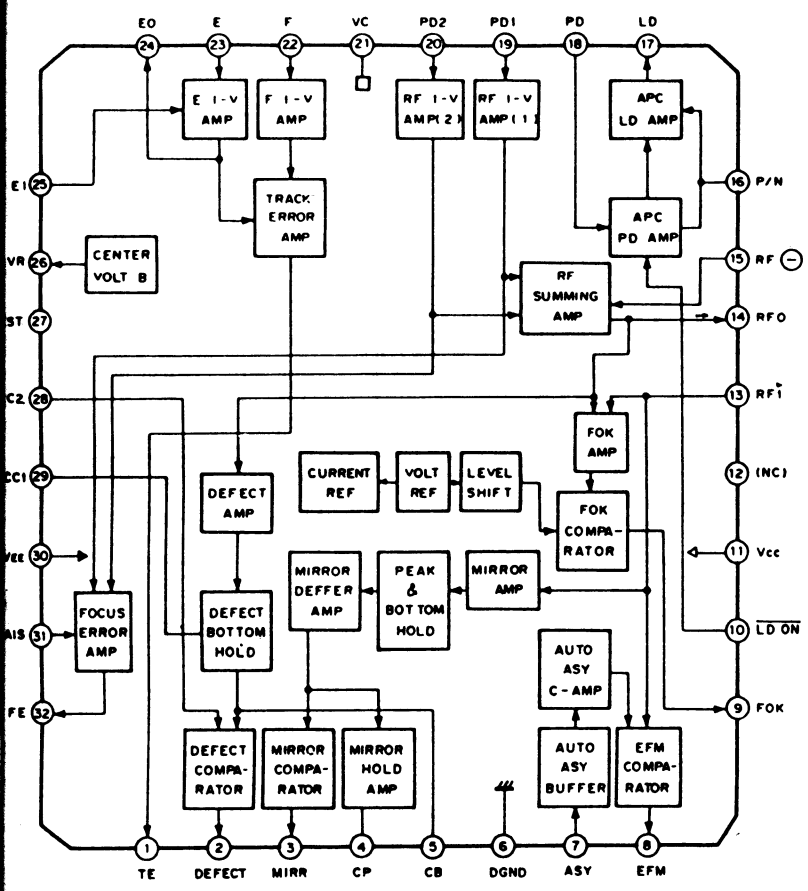
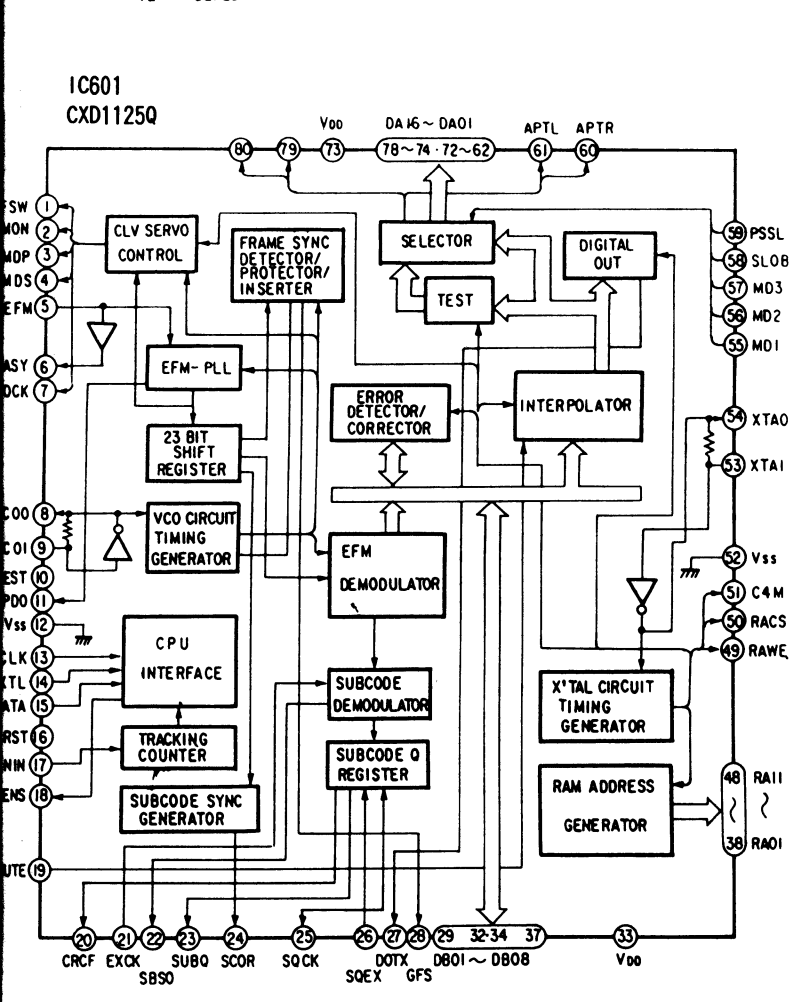
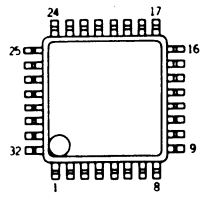


IC601
CXD1125Q



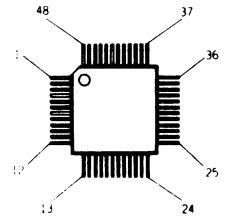
• Semiconductor Lead Layouts

CXA1271Q



MARKING STDE

CXA1272Q-Z



SECTION 5
EXPLODED VIEWS

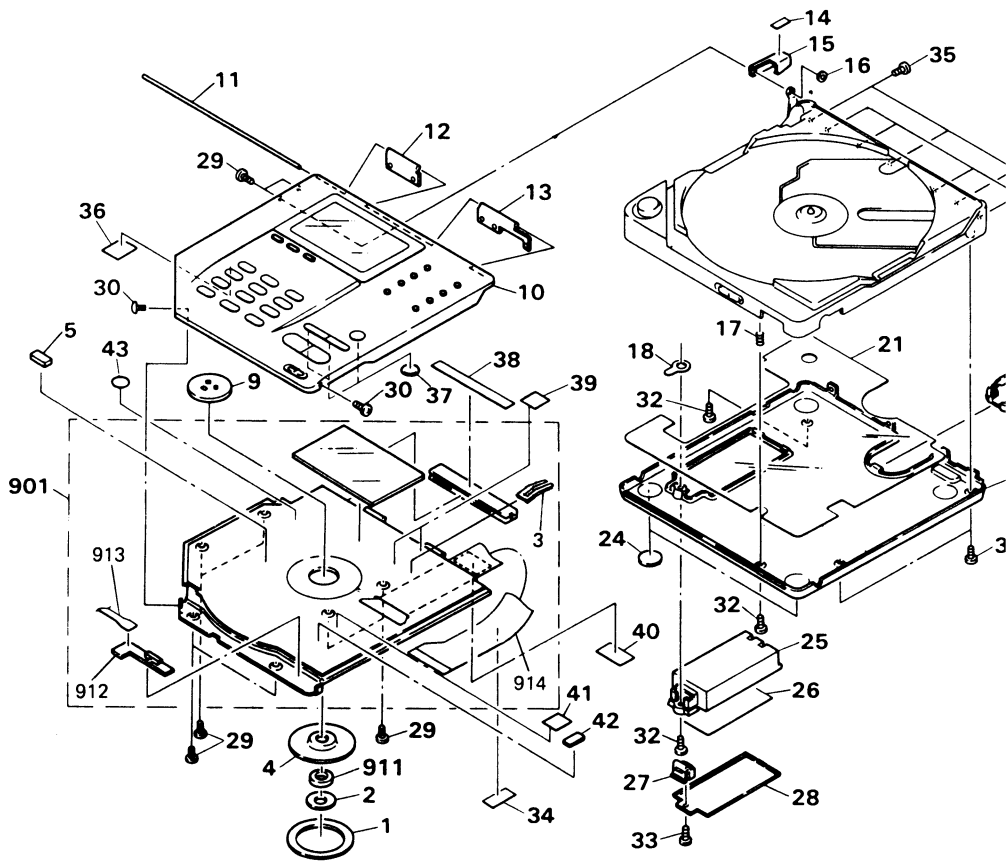
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts' Color

The compo
mark ⚠ or
⚠ are critic
Replace onl
specified.

Les composa
marque ⚠
sécurité.
Ne les rem
pièce portan

(1) UPPER AND BOTTOM PANEL ASSEMBLES

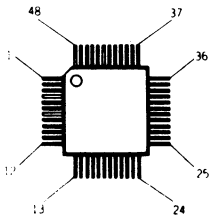


Ref.No	Part No.	Description	Remarks
1	4-917-774-01	SHEET, DISK HOLD	
2	4-908-712-01	WASHER	
3	9-986-870-01	SPRING, GROUND	
4	4-917-737-01	PLATE (A), CHUCK	
5	*3-329-460-01	SPACER	
9	4-917-738-01	PLATE (B), CHUCK	
10	X-4921-253-1	PANEL ASSY, UPPER	
11	4-932-757-01	BAR, FULCRUM	
12	4-932-754-01	HINGE (LEFT)	
13	4-932-736-01	HINGE (RIGHT)	
14	9-911-838-XX	CUSHION	
15	X-4921-251-1	RETAINER ASSY, ARM	
16	3-321-813-11	WASHER, COTTER POLYETHYLENE	
17	4-935-719-01	SPRING	
18	4-935-720-01	SHEET, GROUND	
19	4-932-738-01	LID (B), BATTERY CASE	
20	4-932-758-01	CASE (B), BATTERY	
21	*4-932-795-01	SHEET, INSULATING, BOTTOM	
22	X-4921-259-1	PANEL ASSY, BOTTOM	
24	4-912-641-01	FOOT, RUBBER	
25	4-932-767-01	CASE (A), BATTERY	
26	4-935-717-01	SHEET, BATTERY CASE	

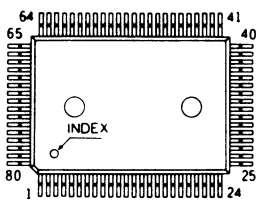
Ref.No	Part No.	Description
27	4-924-165-01	CHIP, LOCK, BATTE
28	4-932-743-01	LID (A), BATTERY C
29	3-703-816-02	SCREW (M1.4X2.0),
30	4-927-589-11	SCREW (M1.4X1.6)
31	3-703-816-12	SCREW (M1.4X4.0),
32	4-908-792-51	SCREW (B2X5), TAP
33	3-318-203-71	SCREW (B1.7X5), TA
34	3-831-441-XX	SPACER, KNOB
35	3-703-816-42	SCREW (M1.4X2.5),
36	4-935-734-01	SPACER (S)
37	*4-924-188-01	CUSHION
38	*4-935-724-01	SPACER (L)
39	*2-387-601-01	CUSHION, RUBBER
40	*4-935-727-01	SPACER (FU)
41	*4-935-728-01	CUSHION (F/R)
42	*4-926-587-01	SPACER
43	4-917-784-01	SPACER (S)
901	1-808-780-11	MODULE, UPPER LI
911	1-452-414-11	MAGNET
912	9-996-857-01	SW BOARD
913	9-996-859-01	SW FLEXIBLE BOAR
914	9-996-858-01	CONNECTION FLEXI

Layouts

CXA1272Q-Z

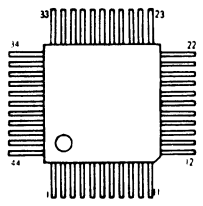


CXD1125Q
CXP5078-029Q

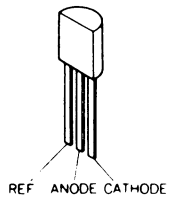


MARKING STDE

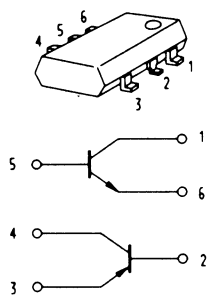
MPC1716FU



TL431CLP



XN4608
XN4609



CTION 5
DDED VIEWS

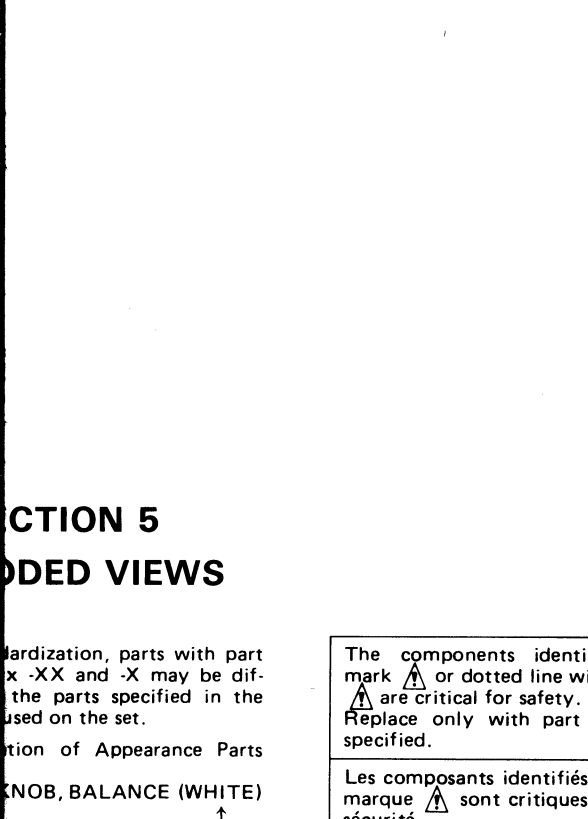
ardization, parts with part x -XX and -X may be dif- the parts specified in the used on the set.

tion of Appearance Parts

NOB, BALANCE (WHITE)
↑
olor Parts' Color

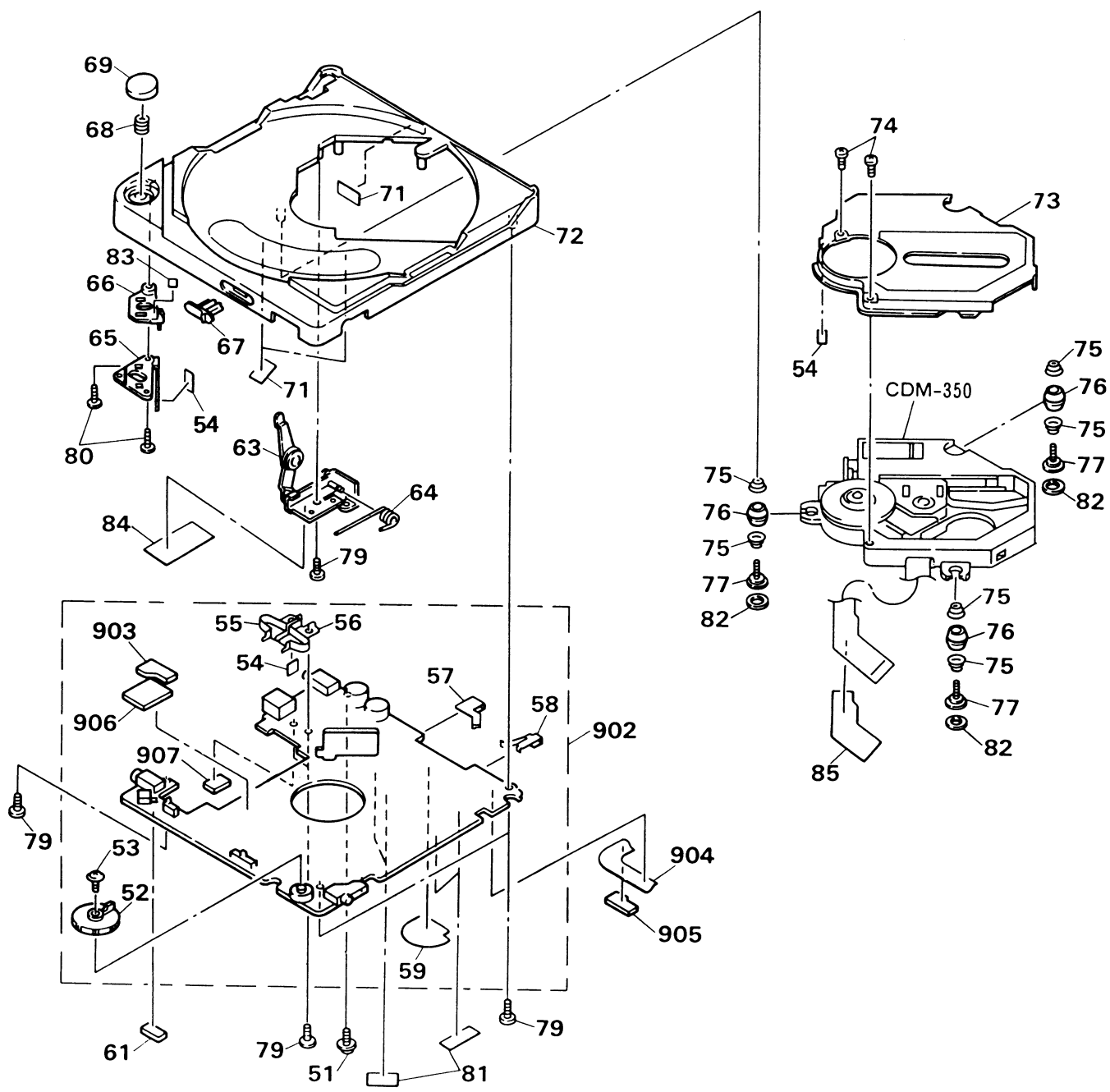
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifé.



Ref.No	Part No.	Description	Remarks
27	4-924-165-01	CHIP, LOCK, BATTERY CASE LID	
28	4-932-743-01	LID (A), BATTERY CASE	
29	3-703-816-02	SCREW (M1.4X2.0), SPECIAL HEAD	
30	4-927-589-11	SCREW (M1.4X1.6)	
31	3-703-816-12	SCREW (M1.4X4.0), SPECIAL HEAD	
32	4-908-792-51	SCREW (B2X5), TAPPING, P1	
33	3-318-203-71	SCREW (B1.7X5), TAPPING	
34	3-831-441-XX	SPACER, KNOB	
35	3-703-816-42	SCREW (M1.4X2.5), SPECIAL HEAD	
36	4-935-734-01	SPACER (S)	
37	*4-924-188-01	CUSHION	
38	*4-935-724-01	SPACER (L)	
39	*2-387-601-01	CUSHION, RUBBER	
40	*4-935-727-01	SPACER (FU)	
41	*4-935-728-01	CUSHION (F/R)	
42	*4-926-587-01	SPACER	
43	4-917-784-01	SPACER (S)	
901	1-808-780-11	MODULE, UPPER LID PANEL	3, 912-914
911	1-452-414-11	MAGNET	
912	9-996-857-01	SW BOARD	
913	9-996-859-01	SW FLEXIBLE BOARD	
914	9-996-858-01	CONNECTION FLEXIBLE BOARD	

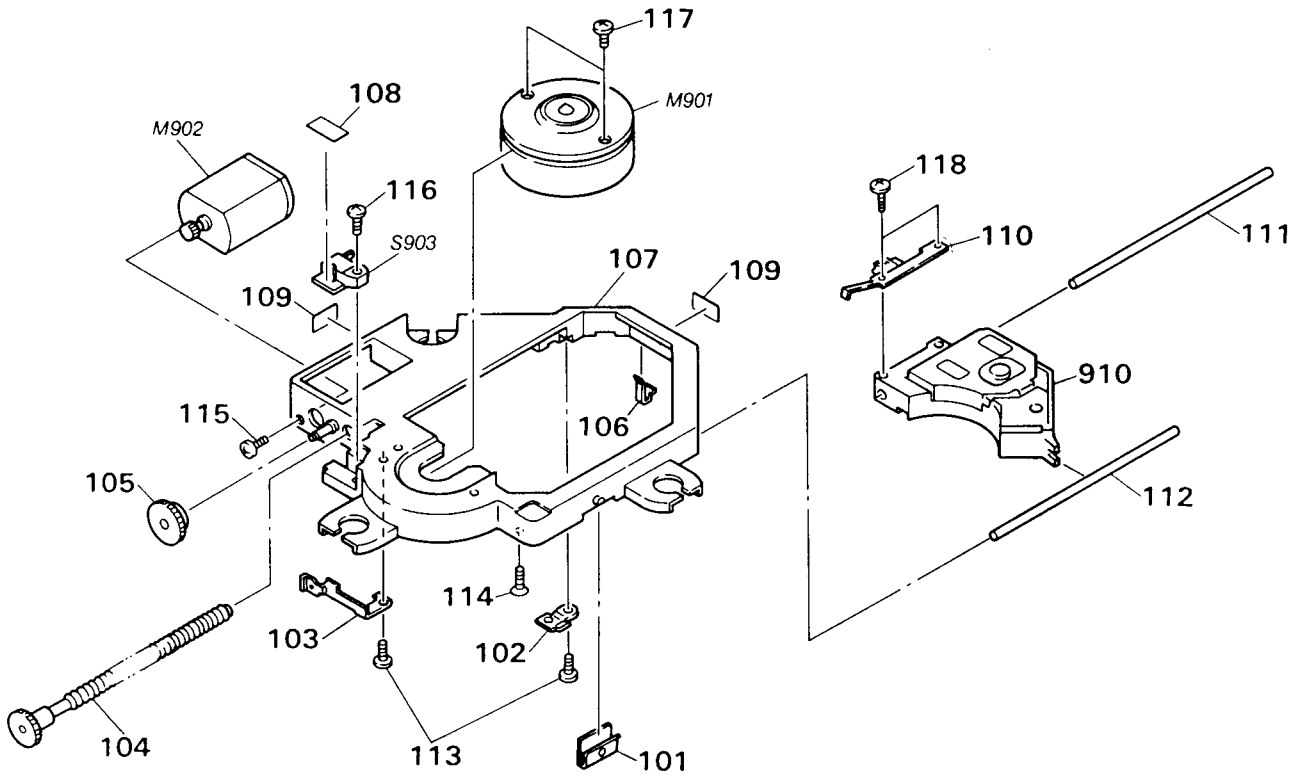
(2) CABINET SECTION



Ref.No	Part No.	Description	Remarks
51	3-335-797-21	SCREW (M1.4X3), TOOTHED LOCK	
52	4-932-763-01	KNOB, VOLUME	
53	3-703-502-31	SCREW	
54	9-911-838-XX	CUSHION	
55	4-932-739-01	SPRING (LEFT)	
56	4-932-740-01	SPRING (RIGHT)	
57	4-932-752-01	TERMINAL ( )	
58	4-932-751-01	TERMINAL (−)	
59	4-935-715-01	SHEET, INSULATING, BATTERY	
61	9-911-841-XX	CUSHION, CASSETTE LID	
63	X-4921-252-1	ARM ASSY, SWITCHING	
64	4-932-734-01	SPRING	
65	X-4921-250-1	RETAINER ASSY, LEVER	
66	4-932-759-01	LEVER, LOCK	
67	4-932-744-01	KNOB, D.B.B.	
68	4-917-727-01	SPRING, COMPRESSION	
69	4-932-746-01	BUTTON, OPEN	
71	3-831-441-XX	SPACER, KNOB	
72	4-932-770-03	CABINET	
73	4-932-789-01	COVER, MD	

Ref.No	Part No.	Description	Remarks
74	3-895-823-41	SCREW (B1.4X4), TAPPING	
75	4-932-792-01	SPRING, COMPRESSION	
76	4-932-791-01	INSULATOR	
77	4-932-780-01	SCREW, STEP	
79	4-908-792-51	SCREW (B2X5), TAPPING, P1	
80	3-316-938-31	SCREW (B1.4X4), TAPPING	
81	3-831-441-11	CUSHION B	
82	4-917-785-01	SPACER	
83	4-926-624-01	SPACER (JACK)	
84	*4-935-727-01	SPACER (FU)	
85	*4-935-723-01	PAPER, SHIELD	
902	A-3015-837-A	(US, Canadian, AEP, E, Australian).... PC BOARD ASSY, MAIN	
902	A-3015-880-A	(UK)....PC BOARD ASSY, MAIN	
903	*1-633-535-11	PC BOARD, MIC	
904	1-631-867-11	PC BOARD, FLEXIBLE	
905	1-568-888-11	SOCKET, CONNECTOR	
906	*1-633-678-11	PC BOARD, FAD	
907	*1-633-692-11	PC BOARD, BAP	

(3) OPTICAL PICK-UP MECHANISM (CDM-350)



Ref.No	Part No.	Description	Remarks
101	4-932-779-01	RETAINER (A), FLEXIBLE	
102	4-932-776-01	RETAINER, SHAFT	
103	4-932-786-01	SPRING, LEAF	
104	X-4921-254-1	FEED SCREW ASSY	
105	4-932-778-01	GEAR (B)	
106	4-932-777-01	RETAINER (B), FLEXIBLE	
107	*4-932-790-01	CHASSIS	
108	9-911-838-XX	CUSHION	
109	3-831-441-XX	SPACER, KNOB	
110	4-932-785-01	RACK (OUTSERT)	
111	4-932-784-01	SHAFT (A)	

Ref.No	Part No.	Description	Remarks
112	4-932-775-01	SHAFT (B)	
113	3-895-823-41	SCREW (B1.4X4), TAPPING	
114	4-921-299-21	SCREW (1.7X6), SPECIAL	
115	4-932-773-11	SCREW	
116	4-908-792-91	SCREW (B2X7), TAPPING, P1	
117	7-627-450-48	SCREW,PRECISION +K1.7X2.5TYPE1	
118	3-891-132-00	SCREW (M1.7X2.0), SPECIAL HEAD	
910	⚠X-4921-260-1	PICKUP, OPTICAL SF-89	
M901	A-3133-398-A	MOTOR ASSY, CLV	
M902	X-4921-256-1	FEED MOTOR ASSY	
S903	1-572-025-11	SWICH, MICRO (LIMIT)	

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No	Part No.	Description
901	1-808-780-11	MODULE, UPPER LID PANEL
902	A-3015-837-A	(US, Canadian, AEP, E, Australian).... PC BOARD ASSY, MAIN
902	A-3015-880-A	(UK)....PC BOARD ASSY, MAIN
903	*1-633-535-11	PC BOARD, MIC
904	1-631-867-11	PC BOARD, FLEXIBLE
905	1-568-888-11	SOCKET, CONNECTOR
906	*1-633-678-11	PC BOARD, FAD
907	*1-633-692-11	PC BOARD, BAP
910	⚠X-4921-260-1	PICKUP, OPTICAL SF-89
911	1-452-414-11	MAGNET
912	9-996-857-01	SW BOARD
913	9-996-859-01	SW FLEXIBLE BOARD
914	9-996-858-01	CONNECTION FLEXIBLE BOARD

CAPACITOR

Ref.No	Part No.	Description			
C103	1-163-145-00	CERAMIC CHIP	0.0015MF	5%	50V
C104	1-135-181-21	TANTAL CHIP	4.7MF	20%	6.3V
C105	1-135-091-00	TANTAL CHIP	1MF	20%	16V
C106	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C107	1-124-576-11	ELECT	220MF	20%	4V
C110	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C111	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C203	1-163-145-00	CERAMIC CHIP	0.0015MF	5%	50V
C204	1-135-181-21	TANTAL CHIP	4.7MF	20%	6.3V
C205	1-135-091-00	TANTAL CHIP	1MF	20%	16V
C206	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C207	1-126-369-11	ELECT	220MF	20%	6.3V
C210	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C211	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C301	1-163-092-00	CERAMIC CHIP	9PF	0.25PF	50V
C302	1-163-092-00	CERAMIC CHIP	9PF	0.25PF	50V
C303	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C304	1-135-092-21	TANTAL CHIP	3.3MF	20%	16V
C305	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C306	1-135-072-21	TANTAL CHIP	0.22MF	20%	35V
C307	1-126-153-11	ELECT	22MF	20%	6.3V
C308	1-135-144-11	TANTAL CHIP	22MF	20%	6.3V
C309	1-135-130-11	TANTAL CHIP	4.7MF	20%	6.3V
C310	1-124-431-00	ELECT	33MF	20%	4V
C311	1-124-431-00	ELECT	33MF	20%	4V
C313	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C314	1-124-584-00	ELECT	100MF	20%	6.3V
C319	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C320	1-135-144-11	TANTAL CHIP	22MF	20%	6.3V
C321	1-135-144-11	TANTAL CHIP	22MF	20%	6.3V
C322	1-135-144-11	TANTAL CHIP	22MF	20%	6.3V
C323	1-135-180-21	TANTAL CHIP	3.3MF	20%	4V
C324	1-164-346-11	CERAMIC CHIP	1MF		16V
C401	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C402	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C403	1-124-584-00	ELECT	100MF	20%	6.3V
C404	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C405	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C406	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C407	1-126-599-11	ELECT	330MF	20%	6.3V
C408	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C409	1-135-174-11	TANTAL CHIP	10MF	20%	10V
C410	1-135-130-11	TANTAL CHIP	4.7MF	20%	6.3V
C411	1-135-162-21	TANTAL CHIP	33MF	20%	4V
C412	1-135-162-21	TANTAL CHIP	33MF	20%	4V
C413	1-135-144-11	TANTAL CHIP	22MF	20%	6.3V
C414	1-135-149-21	(US, Canadian, AEP, E, Australian).... TANTAL CHIP	2.2MF	20%	6.3V
C414	1-135-181-21	(UK).... TANTAL CHIP	4.7MF	20%	6.3V
C415	1-135-174-11	TANTAL CHIP	10MF	20%	10V
C417	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C418	1-124-442-00	ELECT	330MF	20%	6.3V
C419	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C423	1-164-346-11	CERAMIC CHIP	1MF		16V
C424	1-162-638-11	CERAMIC CHIP	1MF		16V
C425	1-164-346-11	CERAMIC CHIP	1MF		16V
C426	1-135-181-21	(UK).... TANTAL CHIP	4.7MF	20%	6.3V
C427	1-164-346-11	CERAMIC CHIP	1MF		16V
C501	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C502	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C503	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C504	1-135-149-21	TANTAL CHIP	2.2MF	20%	6.3V
C505	1-135-130-11	TANTAL CHIP	4.7MF	20%	6.3V
C506	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C507	1-135-162-21	TANTAL CHIP	33MF	20%	4V
C508	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C509	1-135-131-11	TANTAL CHIP	22MF	20%	4V
C510	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C511	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C512	1-135-162-21	TANTAL CHIP	33MF	20%	4V
C513	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C514	1-135-162-21	TANTAL CHIP	33MF	20%	4V
C516	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C517	1-135-149-21	TANTAL CHIP	2.2MF	20%	6.3V
C518	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C519	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C520	1-135-130-11	TANTAL CHIP	4.7MF	20%	6.3V
C521	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C522	1-126-153-11	ELECT	22MF	20%	6.3V
C523	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C524	1-135-131-11	TANTAL CHIP	22MF	20%	4V
C525	1-135-130-11	TANTAL CHIP	4.7MF	20%	6.3V
C526	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C527	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C528	1-135-130-11	TANTAL CHIP	4.7MF	20%	6.3V
C529	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C530	1-164-346-11	CERAMIC CHIP	1MF		16V
C531	1-124-225-00	ELECT	100MF	20%	6.3V
C532	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C533	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C534	1-164-005-11	CERAMIC CHIP	0.47MF		25V

Ref.No	Part No.	Description			
C535	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C536	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C537	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C538	1-135-157-21	TANTAL CHIP	10MF	20%	4V
C539	1-135-157-21	TANTAL CHIP	10MF	20%	4V
C540	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C541	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C542	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C543	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C544	1-135-149-21	TANTAL CHIP	2.2MF	20%	6.3V
C545	1-126-599-11	ELECT	330MF	20%	6.3V
C546	1-135-091-00	TANTAL CHIP	1MF	20%	16V
C547	1-135-174-11	TANTAL CHIP	10MF	20%	10V
C548	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C549	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C550	1-162-638-11	CERAMIC CHIP	1MF		16V
C551	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C552	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C553	1-162-638-11	CERAMIC CHIP	1MF		16V
C554	1-162-638-11	CERAMIC CHIP	1MF		16V
C555	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C556	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C557	1-135-174-11	TANTAL CHIP	10MF	20%	10V
C558	1-135-091-00	TANTAL CHIP	1MF	20%	16V
C559	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C560	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C561	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C562	1-135-131-11	TANTAL CHIP	22MF	20%	4V
C564	1-164-346-11	CERAMIC CHIP	1MF		16V
C601	1-162-638-11	CERAMIC CHIP	1MF		16V
C604	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C605	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C607	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C608	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C701	1-164-346-11	CERAMIC CHIP	1MF		16V
C702	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C703	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C705	1-135-131-11	TANTAL CHIP	22MF	20%	4V
C706	1-135-181-21	TANTAL CHIP	4.7MF	20%	6.3V
C707	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C801	1-163-116-00	CERAMIC CHIP	91PF	5%	50V
C802	1-163-116-00	CERAMIC CHIP	91PF	5%	50V
C803	1-135-149-21	TANTAL CHIP	2.2MF	20%	6.3V
C805	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C806	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C807	1-135-174-11	TANTAL CHIP	10MF	20%	10V
C901	1-164-346-11	CERAMIC CHIP	1MF		16V
CN501	1-568-768-11	HOUSING, CONNECTOR 11P			
CN502	1-563-552-11	SOCKET, CONNECTOR 4P			
CN701	1-569-142-21	HOUSING, CONNECTOR 30P			
CNJ401	1-562-961-11	JACK (DC IN 9V)			
D401	8-719-975-33	DIODE RB110C			
D402	8-719-975-33	DIODE RB110C			
D403	8-719-975-33	DIODE RB110C			
D405	8-719-938-72	DIODE SB01-05CP			
D406	8-719-938-72	DIODE SB01-05CP			
D407	8-719-938-72	DIODE SB01-05CP			
D408	8-719-938-72	DIODE SB01-05CP			
D409	8-719-106-71	DIODE RD12M-B2			
D410	8-719-106-71	DIODE RD12M-B2			
D413	8-719-975-33	DIODE RB110C			
D414	8-719-975-40	DIODE RB411D			
D415	8-719-975-33	DIODE RB110C			
D416	8-719-938-72	DIODE SB01-05CP			

Ref.No	Part No.	Description
D417	8-719-938-72	DIODE SB01-05CP
D419	8-719-800-76	DIODE 1SS226
D420	8-719-400-18	DIODE MA152WK
D421	8-719-975-33	DIODE RB110C
D501	8-719-938-72	DIODE SB01-05CP
D502	8-719-938-72	DIODE SB01-05CP
D503	8-719-938-72	DIODE SB01-05CP
D701	8-719-400-18	DIODE MA152WK
D702	8-719-400-18	DIODE MA152WK
D705	8-719-400-18	DIODE MA152WK
D801	8-719-938-72	DIODE SB01-05CP
D802	8-719-800-76	DIODE 1SS226
D805	8-719-400-18	DIODE MA152WK
D806	8-719-400-18	DIODE MA152WK
D807	8-719-400-18	DIODE MA152WK
IC301	8-752-334-07	IC CXD2551M
IC302	8-759-148-30	IC UPD6376
IC303	8-759-991-27	IC BA3570F
IC304	8-759-230-43	IC TC7S04F
IC401	8-759-013-27	IC MC34063ML
IC402	8-759-995-27	IC MB3776APF
IC403	8-759-230-43	IC TC7S04F
IC404	8-759-994-55	IC RH5RC351A
IC406	8-759-710-82	IC NJM2406F
IC407	8-759-908-15	IC TL431CLP
IC407	8-759-908-15	IC TL431CLP
IC501	8-752-036-76	IC CXA1271Q-T3
IC502	8-752-033-54	IC CXA1272Q-Z
IC503	8-759-710-79	IC NJM2107F
IC504	8-759-030-17	IC MPC1715
IC505	8-759-230-43	IC TC7S04F
IC601	8-752-332-38	IC CXD1125Q
IC602	8-752-328-67	IC CXK5816MA-15L
IC701	8-759-710-79	IC NJM2107F
IC702	8-759-230-43	IC TC7S04F
IC703	8-759-007-43	IC MC74HC00F
IC801	8-752-814-73	IC CXP5078-040Q
IC802	8-759-986-85	IC S-8052ALR-LF
IC803	8-759-977-64	IC BA3818F
J301	1-568-758-11	JACK (PHONES/REMOTE)
J302	1-563-280-21	JACK (LINE OUT)
J701	1-563-280-31	JACK (REMOTE)
JR301	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR302	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR303	1-216-296-00	(US, Canadian, AEP, E, Australian).... METAL GLAZE 0 5% 1/8W
JR401	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR402	1-216-295-00	(US, Canadian, AEP, E, Australian).... METAL GLAZE 0 5% 1/10W
JR403	1-216-296-00	(US, Canadian, AEP, E, Australian).... METAL GLAZE 0 5% 1/8W
JR404	1-216-296-00	(US, Canadian, AEP, E, Australian).... METAL GLAZE 0 5% 1/8W
JR501	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR502	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR503	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR701	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR702	1-216-295-00	METAL GLAZE 0 5% 1/10W

Ref.No	Part No.	Description
L101	1-410-997-31	INDUCTOR CHIP 2.2UH
L102	1-410-997-31	INDUCTOR CHIP 2.2UH
L201	1-410-997-31	INDUCTOR CHIP 2.2UH
L202	1-410-997-31	INDUCTOR CHIP 2.2UH
L303	1-410-997-31	INDUCTOR CHIP 2.2UH
L304	1-410-997-31	INDUCTOR CHIP 2.2UH
L401	1-459-842-11	COIL (WITH CORE)
L402	1-459-961-21	COIL (WITH CORE)
L403	1-412-031-11	INDUCTOR CHIP 47UH
L404	1-412-031-11	INDUCTOR CHIP 47UH
L405	1-412-029-11	INDUCTOR CHIP 10UH
L406	1-412-029-11	INDUCTOR CHIP 10UH
L407	1-412-032-11	INDUCTOR CHIP 100UH
L408	1-412-031-11	INDUCTOR CHIP 47UH
L409	1-412-029-11	INDUCTOR CHIP 10UH
L501	1-412-029-11	INDUCTOR CHIP 10UH
L502	1-412-031-11	INDUCTOR CHIP 47UH
L503	1-412-031-11	INDUCTOR CHIP 47UH
L504	1-412-031-11	INDUCTOR CHIP 47UH
L505	1-412-031-11	INDUCTOR CHIP 47UH
L506	1-412-031-11	INDUCTOR CHIP 47UH
L507	1-412-031-11	INDUCTOR CHIP 47UH
L508	1-412-031-11	INDUCTOR CHIP 47UH
L509	1-412-031-11	INDUCTOR CHIP 47UH
L510	1-412-029-11	INDUCTOR CHIP 10UH
M901	A-3133-398-A	MOTOR ASSY, CLV
M902	X-4921-256-1	FEED MOTOR ASSY
PS401⚠	1-532-679-21	(UK)....LINK, IC
Q101	8-729-159-64	TRANSISTOR 2SD596
Q201	8-729-159-64	TRANSISTOR 2SD596
Q301	8-729-159-64	TRANSISTOR 2SD596
Q302	8-729-923-36	TRANSISTOR 2SD1963-Q,R
Q303	8-729-923-36	TRANSISTOR 2SD1963-Q,R
Q304	8-729-904-87	TRANSISTOR 2SB1197K-R
Q305	8-729-903-10	TRANSISTOR FMW1
Q306	8-729-921-05	(UK)....TRANSISTOR DTA124EK
Q401	8-729-923-45	TRANSISTOR 2SB1308-QR
Q402	8-729-920-56	TRANSISTOR FMG1
Q403	8-729-216-22	TRANSISTOR 2SA1162
Q404	8-729-901-00	TRANSISTOR DTC124EK
Q405	8-729-923-45	TRANSISTOR 2SB1308-QR
Q407	8-729-923-45	TRANSISTOR 2SB1308-QR
Q408	8-729-923-45	TRANSISTOR 2SB1308-QR
Q409	8-729-924-79	TRANSISTOR FMG8
Q411	8-729-923-36	TRANSISTOR 2SD1963-Q,R
Q413	8-729-159-64	TRANSISTOR 2SD596
Q414	8-729-901-05	TRANSISTOR DTA124EK
Q415	8-729-901-00	TRANSISTOR DTC124EK
Q416	8-729-920-56	TRANSISTOR FMG1
Q417	8-729-107-43	TRANSISTOR 2SC3624-L18
Q418	8-729-230-49	TRANSISTOR 2SC2712-YG
Q419	8-729-903-30	TRANSISTOR DTC144TK
Q501	8-729-402-90	TRANSISTOR XN4609
Q502	8-729-904-87	TRANSISTOR 2SB1197K-R
Q505	8-729-901-00	TRANSISTOR DTC124EK
Q506	8-729-901-00	TRANSISTOR DTC124EK
Q507	8-729-924-79	TRANSISTOR FMG8
Q701	8-729-906-45	TRANSISTOR DTA143XK
Q702	8-729-901-00	TRANSISTOR DTC124EK
Q704	8-729-901-05	TRANSISTOR DTA124EK
Q705	8-729-900-99	TRANSISTOR DTA144WK
Q706	8-729-923-04	TRANSISTOR DTC123YK
Q707	8-729-901-00	TRANSISTOR DTC124EK
Q801	8-729-902-96	TRANSISTOR FMS1
Q802	8-729-902-96	TRANSISTOR FMS1
Q803	8-729-902-96	TRANSISTOR FMS1
Q804	8-729-903-29	TRANSISTOR DTA144TK
Q805	8-729-901-05	TRANSISTOR DTA124EK
Q806	8-729-402-16	TRANSISTOR XN4608

Ref.No	Part No.	Description			
		RESISTOR			
R101	1-216-047-00	METAL GLAZE	820	5%	1/10W
R102	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R103	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R104	1-216-033-00	METAL GLAZE	220	5%	1/10W
R106	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R108	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R109	1-216-037-00	METAL GLAZE	330	5%	1/10W
R110	1-216-001-00	METAL GLAZE	10	5%	1/10W
R201	1-216-047-00	METAL GLAZE	820	5%	1/10W
R202	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R203	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R204	1-216-033-00	METAL GLAZE	220	5%	1/10W
R206	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R208	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R209	1-216-037-00	METAL GLAZE	330	5%	1/10W
R210	1-216-001-00	METAL GLAZE	10	5%	1/10W
R301	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R302	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R303	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R304	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R306	1-216-013-00	METAL GLAZE	33	5%	1/10W
R307	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R308	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R310	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R311	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R313	1-216-043-00	METAL GLAZE	560	5%	1/10W
R314	1-216-043-00	METAL GLAZE	560	5%	1/10W
R315	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R316	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R317	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R318	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R319	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R320	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W
R323	1-216-198-00	(UK).... METAL GLAZE	1K	5%	1/8W
R324	1-216-150-00	(UK).... METAL GLAZE	10	5%	1/8W
R401	1-216-047-00	METAL GLAZE	820	5%	1/10W
R402	1-216-035-00	METAL GLAZE	270	5%	1/10W
R403	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R404	1-216-662-11	METAL CHIP	3K	0.50%	1/10W
R405	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R406	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R407	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R408	1-216-304-11	METAL GLAZE	3.3	5%	1/10W
R409	1-216-304-11	METAL GLAZE	3.3	5%	1/10W
R410	1-216-748-11	METAL GLAZE	39K	5%	1/10W
R411	1-216-033-00	METAL GLAZE	220	5%	1/10W
R412	1-216-748-11	METAL GLAZE	39K	5%	1/10W
R413	1-216-748-11	METAL GLAZE	39K	5%	1/10W
R414	1-216-017-00	METAL GLAZE	47	5%	1/10W
R415	1-216-025-00	METAL GLAZE	100	5%	1/10W
R416	1-216-041-00	METAL GLAZE	470	5%	1/10W
R418	1-216-186-00	METAL GLAZE	330	5%	1/8W
R419	1-216-186-00	METAL GLAZE	330	5%	1/8W
R420	1-216-186-00	METAL GLAZE	330	5%	1/8W
R420	1-216-037-00	(UK).... METAL GLAZE	330	5%	1/10W

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No	Part No.	Description			
R421	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R422	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R423	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R424	1-216-047-00	METAL GLAZE	820	5%	1/10W
R425	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R426	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R427	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R428	1-216-092-00	METAL GLAZE	62K	5%	1/10W
R429	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R430	1-216-662-11	METAL CHIP	3K	0.50%	1/10W
R431	1-216-041-00	METAL GLAZE	470	5%	1/10W
R432	1-216-115-00	METAL GLAZE	560K	5%	1/10W
R433	1-216-120-00	METAL GLAZE	910K	5%	1/10W
R434	1-216-041-00	METAL GLAZE	470	5%	1/10W
R435	1-216-111-00	METAL GLAZE	390K	5%	1/10W
R436	1-216-111-00	METAL GLAZE	390K	5%	1/10W
R438	1-216-106-00	METAL GLAZE	240K	5%	1/10W
R439	1-216-025-00	(UK)....			
		METAL GLAZE	100	5%	1/10W
R502	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R503	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R504	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R505	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R506	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R507	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R508	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R509	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R510	1-216-001-00	METAL GLAZE	10	5%	1/10W
R511	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R512	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R513	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R516	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R517	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R519	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R520	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R521	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R522	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R523	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R524	1-216-115-00	METAL GLAZE	560K	5%	1/10W
R525	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R526	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R527	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R528	1-216-103-00	METAL GLAZE	180K	5%	1/10W
R529	1-216-062-00	METAL GLAZE	3.6K	5%	1/10W
R530	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R531	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R532	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R533	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R534	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R535	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R536	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R538	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R539	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R541	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R542	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R543	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R544	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R545	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R546	1-216-748-11	METAL GLAZE	39K	5%	1/10W
R547	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R548	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R549	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R550	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R551	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R552	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R553	1-216-073-00	METAL GLAZE	10K	5%	1/10W

Ref.No	Part No.	Description			
R554	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R556	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R559	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R560	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R561	1-216-047-00	METAL GLAZE	820	5%	1/10W
R562	1-216-117-00	METAL GLAZE	680K	5%	1/10W
R601	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R602	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R701	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R703	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R704	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R705	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R706	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R707	1-216-125-00	METAL GLAZE	1.5M	5%	1/10W
R708	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R801	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R802	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R803	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R804	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R805	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R806	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R808	1-216-121-00	METAL GLAZE	1.0M	5%	1/10W
R809	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R811	1-216-845-11	METAL GLAZE	100K	5%	1/10W
R812	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R813	1-216-773-11	METAL GLAZE	68K	5%	1/10W
R814	1-216-542-11	METAL GLAZE	12K	5%	1/10W
R815	1-216-329-11	METAL GLAZE	5.1K	5%	1/10W
R816	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R821	1-216-845-11	METAL GLAZE	100K	5%	1/10W
R822	1-216-833-11	METAL GLAZE	10K	5%	1/10W
R823	1-216-773-11	METAL GLAZE	68K	5%	1/10W
R824	1-216-542-11	METAL GLAZE	12K	5%	1/10W
R825	1-216-329-11	METAL GLAZE	5.1K	5%	1/10W
R826	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R831	1-216-845-11	METAL GLAZE	100K	5%	1/10W
R832	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R833	1-216-773-11	METAL GLAZE	68K	5%	1/10W
R834	1-216-542-11	METAL GLAZE	12K	5%	1/10W
R835	1-216-329-11	METAL GLAZE	5.1K	5%	1/10W
R836	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R841	1-216-845-11	METAL GLAZE	100K	5%	1/10W
R842	1-216-833-11	METAL GLAZE	10K	5%	1/10W
R843	1-216-773-11	METAL GLAZE	68K	5%	1/10W
R844	1-216-542-11	METAL GLAZE	12K	5%	1/10W
R845	1-216-329-11	METAL GLAZE	5.1K	5%	1/10W
R846	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R851	1-216-845-11	METAL GLAZE	100K	5%	1/10W
R852	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R853	1-216-773-11	METAL GLAZE	68K	5%	1/10W
R854	1-216-542-11	METAL GLAZE	12K	5%	1/10W
R855	1-216-329-11	METAL GLAZE	5.1K	5%	1/10W
R856	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R861	1-216-845-11	METAL GLAZE	100K	5%	1/10W
R862	1-216-833-11	METAL GLAZE	10K	5%	1/10W
R865	1-216-329-11	METAL GLAZE	5.1K	5%	1/10W
R866	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R871	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R872	1-216-073-00	METAL GLAZE	10K	5%	1/10W
RV301	1-230-485-11	RES, VAR, CARBON 10K/10K (VOLUME)			
RV401	1-237-324-11	RES, ADJ, METAL GLAZE 2.2K			
RV402	1-237-325-11	RES, ADJ, METAL GLAZE 4.7K			
RV403	1-237-330-21	RES, ADJ, METAL GLAZE 220K			
RV501	1-237-119-11	RES, ADJ, METAL GLAZE 22K			
RV502	1-237-119-11	RES, ADJ, METAL GLAZE 22K			

Ref.No	Part No.	Description
RV503	1-237-328-11	RES, ADJ, METAL GLAZE 47K
RV504	1-237-323-11	RES, ADJ, METAL GLAZE 1K
RV505	1-237-119-11	RES, ADJ, METAL GLAZE 22K
S301	1-570-724-11	SWITCH, SLIDE (DBB)
S811	9-996-860-01	TACT SWITCH (SET)
S816	9-996-860-01	TACT SWITCH (TIME)
S821	9-996-860-01	TACT SWITCH (TIMER)
S831	1-570-397-11	SWITCH, SLIDE (HOLD)
S901	1-572-126-11	SWITCH, PUSH (1 KEY) (OPEN)
S902	1-570-953-11	SWITCH, PUSH (1 KEY) (DOOR)
S903	1-572-025-11	SWICH, MICRO (LIMIT)
X301	1-577-576-11	VIBRATOR, CRYSTAL (16.93MHz)
X801	1-567-094-00	VIBRATOR, CERAMIC (3.58MHz)
X802	9-996-868-01	VIBRATOR, CRYSTAL (32.768MHz)

Part No.	Description
	ACCESSORIES & PACKING MATERIALS
	**********
A-3017-195-A	EBP-4 ASSY
X-4921-261-1	CASE ASSY, CARRYING
1-463-694-11	(Canadian)....ADAPTOR, AC (AC-930A)
1-463-700-11	(UK)....ADAPTOR, AC (AC-930A)
1-463-701-11	(Australian)....ADAPTOR, AC (AC-930A)
1-463-702-11	(E)....ADAPTOR, AC (AC-950W)
1-463-705-11	(AEP)....ADAPTOR, AC (AC-930AEP)
1-463-968-11	(US)....ADAPTOR, AC (AC-940)
1-505-106-11	(Canadian, E, Australian)..... HEADPHONE (WITH REMOTE CONTROL)
1-505-106-21	(US, AEP, UK).... HEADPHONE (WITH REMOTE CONTROL)
1-528-303-11	BATTERY PACK (BP-5)
1-575-145-11	CORD, CONNECTION
3-751-026-12	(Canadian, AEP, E, Australian).... MANUAL INSTRUCTION
3-751-026-21	(US)....MANUAL, INSTRUCTION
3-751-026-41	(AEP)....MANUAL, INSTRUCTION
4-916-659-01	LID, BATTERY CASE (FOR EBP-4)
*4-920-407-01	BAG, PROTECTION
*4-935-701-01	CUSHION (UPPER)
*4-935-702-01	(US, Canadian, E)....CUSHION (LOWER)
*4-935-703-01	(US, Canadian)....INDIVIDUAL CARTON
*4-935-707-01	(E)....INDIVIDUAL CARTON
*4-935-708-01	(AEP, UK, Australian)....CUSHION (LOWER)
*4-935-709-01	(AEP, UK, Australian)....INDIVIDUAL CARTON

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